# IOWA MEDICAL JOURNAL

Vol. XVIII Des Moines, April 15, 1912 No. 10

## Original Articles.

### THE ECONOMIC WASTE FROM DISABILITY AND DEATHS DUE TO PREVENTABLE DISEASES.*

ARETAS E. KEPFORD, STATE LECTURER.

MR. PRESIDENT, LADIES AND GENTLEMEN:

I greatly appreciate the honor of appearing before this distinguished body. I desire in the period allotted to discuss briefly, "The Economic Waste from Disability and Deaths due to Preventable Diseases," and to set forth some of the causes of this waste of commercial power. It may safely be stated that the health of our citizens is the most valuable asset the state possesses. It does not require much philosophy to conclude that commercial resources cannot be developed in their highest possibilities unless we have a strong, virile citizenship. The efficiency and earning power of the average man of any community determines the commercial power of that community. An intelligent, strong, well man is a vital economic factor and the increase in population of strong, healthy people in any state is a sure index of commercial supremacy.

This evolves a fundamental economic principle: That public health is one reasonable basis for commercial stability. Human efficiency depends upon three things. First, a sound body; second, a sound mind, and third, adequate preparation for a vocation in life. Such individuals are wealth producing factors. They are the working capital of the concern; the investment that never fails to produce dividends. But few of us, however, realize this. We have not been trained in human values. We have, like the heroine of the Canticles, cultivated other vineyards while neglecting our own. We have been sentimental and traditional rather than reasonable in our estimate of the worth of a man. We have had no physical standards of valuation. This may be illustrated best by the fact that in certain industries, the

*Read before the Missouri Valley Medical Society at Colfax, Iowa, March 22, 1912.

life of an ordinary man counts for practically nothing. His strength, vigor and manhood are transmuted into dollars ruthlessly and inexorably. We have made business an idol to whom, as a god, we offer our most precious sacrifices.

I have been forcibly impressed with a recent statement that life has two dimensions—length and breadth. Then length of life, as all know, is the period of existence between the cradle and the grave, but breadth of life is another aspect. Some lives begin with physical handicaps which foreclose on any service of value, no matter what length the life may be and may be represented by an imaginary line. I refer to idiots and imbeciles and congenital defectives. They contribute nothing to the common welfare.

Others are the victims of ignorant parents or a blundering state and are early incapacitated of rendering to the community any service of value. For the rest, they live lives of variable lengths and narrow breadths. Breadths of life is the lateral measure of physical health, mental power and capacity for work. If everybody was absolutely well, his bodily functions normal and measuring up to the fullest capacity, what an additional volume of power, if intelligently exerted could be expended in building the material, intellectual and moral resources of the state. It is this lateral dimension of life which must ultimately be recognized by the public as fundamental from an economic point of view. Not only prevent untimely termination of human life from preventable causes, but to widen its surface and deepen its volume, by protecting the public health, thus removing many of the minor ills which invalidate the highest efficiency of men.

Thanks to preventive medicine for bringing to us a new appreciation of human values. The civilized world is fast coming to realize that a strong, healthy citizen is the real standard of value. The fiat of commercial power is the virile man behind the dollar. To conserve health and life is a commercial enterprise of the first magnitude. In a significant way this intelligent, wealth-producing biped becomes an integral part of the industrial and financial world.

That brings me to another fundamental economic principle: That whatever safeguards the health of the public increases the wealth-producing power of the community. That to devise ways and means by which the health and lives of our people may be protected, is of more serious importance than any other of the seriously important things to be taken into consideration in the development of the material resources of the state. Stripped of all sentiment and expressed in terms of dollars, there is a financial value to men, women and children, the same as stock or farm products or strictly commercial enterprises. A baby has an economic value. A boy or girl through high

school on the average represents an investment of $1,800.00 and when equipped for life as a producing factor, the investment is increased into thousands of dollars and yet, gentlemen, much more attention has been paid to the conservation of our natural resources than to this industrial dynamic. It is wise to protect the public domain against avarice and greed and vandalism, but unwise to forget to protect men and women against the "slings and arrows of outrageous fortune" which preventable bodily ailments may impose, or industrial conditions induce.

Up to a very recent date, business failed to place a proper valuation on man as a commercial entity. It was busy with other enterprises. It dealt with the grosser forms of communities. Legislatures reflected this sentiment and put a premium on agricultural and industrial undertakings. We have graded up our stock until the intelligence and culture of man can push the idea no further and the value of those fine animals reaches into fancy figures and yet there is not an intelligent, industrious man in this country but who is worth more than any such animal no matter how fine the pedigree of the animal or how poor the blood of the man.

Sometimes when the guardians of public health have demanded protection against public calamity, they have been regarded as interfering with normal business relations. I have known men to subject the neighborhood to the dangers of tuberculosis because they feared if their dairy herd was tested with tuberculin, it would result in the loss of a few dollars. Dirty milk kills babies and yet I have known milk, the most important article of diet, to be produced under the most insanitary and vicious conditions, destroying the lives of infants and little children, because to stop it might interfere with business.

Men have been sweated and overworked until the last ounce of vitality has been extracted from their bodies and the poisons of fatigue rendered them incapable of resisting disease or vice because some factory or shop must pay dividends on watered stock. I have known cities and towns to use the public health department as a political perquisite with neither ability nor funds for this important function of public administration.

Epidemics have swept through cities and towns, killing and maiming the citizens and leaving a train of destruction, resulting in vast financial loss, all because measures of protection were deemed unnecessary or inadvisable.

I come now to a discussion of the city's responsibility for the health of the citizen. I suppose that few public officials in charge of municipalities really appreciate the fact that they are responsible in a direct way for the health of the citizens under their jurisdiction. A responsibility inheres with the office. Not only should they exercise

police powers to protect the lives and property of the citizens but it is expected that they will protect the health of the citizens as well. The state has police power and whatever is a menace or a nuisance can be abated. But I believe I am safe in stating that the average public official, aside from the city physician or health officer, does not feel responsible in any great degree in conserving the health and lives of the citizens against preventable diseases. It is quite difficult to interest a city council to the point of actual control of the food supply. This is because there is general lack of training of the average citizen along these lines. A dairy, for instance, may supply milk to the city without any particular attention of the mayor or the alderman. A few so-called "cranks" may raise some local disturbance concerning the insanitary condition of a dairy, but they are regarded as disturbers of the public peace rather than public benefactors. An inferior meat supply may be sold in the city without surveillance on the part of the constituted authorities. The city health department may utter a protest but because it interferes with general business, the authorities pass the matter by as of insufficient importance to warrant general interference. Often foods of various kinds, inferior in quality and nutritive value, are dispensed to the people without any thought on the part of city officials that they should interest themselves in the matter. No thought is given to the housing of the people. The great importance of sufficient fresh air and a proper environment for individual families is given no attention. The housing of our people is most important. In many of the smaller cities, surface wells are adjacent to privy vaults, which many times contaminate the water of these wells, inducing typhoid fever. I am not uttering these words in any spirit of criticism. I am pointing out the lack of training of the average city official who is the average citizen.

How many city officials know the number of outside privy vaults in the city? How many know the location of surface wells which supply water to citizens? How many cities have charts pertaining to these vital sanitary questions? What knowledge does the city council have of the sanitation and ventilation of the school building in which their children are seven hours of the day, much of the time sitting in postures which cramp the organs of respiration? How many have studied the question of the general health of the community? Comparatively few, and yet these men have average intelligence, many times superior in knowledge and demonstrate fine ability to administer public office. But aside from the routine business of the city, there is no general knowledge or responsibility for the protection of men, women and children against minor and serious illness which may befall them.

Sanitation and hygiene are commercial entities which hereafter must be involved in efficient municipal administration. The time is coming when every city will chart its danger points and will spend much time and money in studying the questions pertaining to public health. The men who aspire or are chosen to official position will be required to know something of sanitation and hygiene as these things will represent a large financial value to the public as the following study of some particular diseases will indicate.

I use some particular diseases because of the familiarity of the public with them and because they can be reduced to terms of dollars and expressed in such a way as to be readily understood by men who are engaged in business enterpises. It has been stated that for every death from typhoid fever, there are about eight cases of sickness from this disease, averaging 75 days of incapacity. In the year 1911, statistics show there were 309 deaths reported in Iowa from typhoid fever. Multiplied by 8 gives a total of 2,472 invalided by this disease. Multiply this number by 75, the average number of days of incapacity and there will be a total of 186,400 days, representing 510 years of economic loss. Allowing $350.00 as the loss sustained for each sick person, it represents $865,200.00. We have not taken into consideration thus far, the loss of life. We have been dealing with the invalidism of those who recover. There were 309 deaths from this disease in Iowa in 1911 and it will be safe to assume that each person thus dying represents a value to the state of at least $1,500.00. If this estimate is permitted to stand, we have the sum of $463,500.00 loss in deaths from this disease. By adding the cost of disability and the cost of mortality, it gives us a grand total of $1,328,700.00 as the tribute levied upon the resources of the state from typhoid fever alone.

The Chicago Tribune of March 17th has the following:

"Dr. Edward Bartow, head of the Illinois state water survey, has completed the compilation of an extensive set of statistics showing that the excess of typhoid fever deaths in America, equals 18 per 100,000 population.

In 1909 there were more cases of typhoid fever in this country than cases of plague in India, despite the fact that India's population is two and one-half times greater. From January, 1907 to October, 1911, there occurred in Russia 283,684 cases of Asiatic cholera, this including the appalling epidemic of 1910.

According to a conservative estimate, there occurred in the United States for the same period one million and a quarter cases of typhoid, or more than four cases of typhoid fever in the United States for every single case of cholera in Russia.

In Italy in 1910-1911, there were about 16,000 cases of cholera and

about 6,000 deaths, and in the United States there were a half million cases of typhoid fever and 50,000 deaths.

'Yet' says Dr. Bartow, 'we are accustomed to think of these countries as pest-ridden.' "

If Dr. Bartow is correctly quoted that in 1910 and 1911 there were 500,000 cases of typhoid fever in the United States, it is evident that as a nation we are prodigal of human health and life. The vast, incomprehensible sum of $250,000,000 proves it and it is almost inconceivable that anyone should oppose any measure proposed by the government to mitigate this dreadful state of affairs.

In discussing tuberculosis, I find myself on familiar ground, due to the fact that in Iowa we have quite exact data and can base our conclusions in a more scientific manner than in either of the preceding diseases. Epidemics of smallpox, typhoid fever, scarlet fever and diphtheria have served to arouse business interests to the necessity of preventing the recurrence of such calamities, as the loss of money resulting is not only very great but irretrievable. The demoralization that follows an epidemic is disastrous to all lines of business and disturbs the equanimity and peace of the entire neighborhood. Tuberculosis, however, is a continuous epidemic and it is the most expensive of diseases. The toll it exacts annually in the United States in lives and treasure, is frightful.

We have reached the period in our educational propaganda at which we are ready to present the palpable facts concerning this disease, and the dollar sign stands out in contrast to everything else. It is a recognized fact that tuberculosis seeks the choicest spirits in the community. The ambitious and hardworking, as a rule, are among its victims. These people have been devitalized and the normal resistance of their bodies has been reduced. Attacked by this disease, it destroys them. They are among the most potent and valuable in the community. They are the wage earners. They are the business men. They are the mothers surrounded by groups of little children. They are youths in the high schools and colleges. They are the men and women who do the world's work, and we let them die, but what does it cost? Let us see!

I took the number of persons who died last year in Iowa from pulmonary tuberculosis, in all 1411, and basing my calculations on the biennial report of the State Sanatorium for the Treatment of Tuberculosis at Oakdale, I found that during the two-year period there were admitted to the State Sanatorium 506 persons, divided into age periods as follows:

| | |
|---|---|
| Under 15 years of age | 40 |
| Between 15 and 20 years of age | 78 |
| Between 20 and 25 years of age | 127 |

| | |
|---|---|
| Between 25 and 30 years of age | 87 |
| Between 30 and 35 years of age | 64 |
| Between 35 and 40 years of age | 51 |
| Between 40 and 50 years of age | 45 |
| Between 50 and 60 years of age | 12 |
| Between 60 and 70 years of age | 2 |

By assuming that the Sanatorium is representative of tuberculosis by age periods for the whole state, I have found that of the whole number dying during the year 1910, there were,

111 who died under the age of 15.
217 between 15 and 20 years of age.
354 between 20 and 25 years of age.
242 between 25 and 30 years of age.
178 between 30 and 35 years of age
142 between 35 and 40 years of age.
125 between 40 and 50 years of age.
33 between 50 and 60 years of age.
5 between 60 and 70 years of age.

Based upon the American Life Insurance table of expectancy I find that those dying between the ages of 15 and 60 years were entitled to live 36.35 years longer.

The table shows that of the 217 dying between 15 and 20 years of age each was entitled to live an average of 44.18 years longer, a total for all of 9587 years.

Of the 354 dying between the ages of 20 and 25 years each was entitled to live an average of 40.84 years longer, a total for all of 14,417 years.

Of the 242 dying between the ages of 25 and 30 years each was entitled to live an average of 35.42 years longer, a total for all of 8,571 years.

Of the 178 dying between the ages of 30 and 35 years each was entitled to live an average of 33.99 years longer, a total for all of 6,050 years.

Of the 142 dying between the ages of 35 and 40 years each was entitled to live an average of 30.34 years longer, a total for all of 4,308 years.

Of the 125 dying between the ages of 40 and 50 years each was entitled to live an average of 24.9 years longer, a total for all of 3,112 years.

Of the 33 dying between the ages of 50 and 60 years each was entitled to live an average of 17.78 years longer, a total for all of 586 years.

This represents an aggregate loss of 46,631 years, and it will be seen that these years represent the highest efficiency and earning capacity of the persons dying. I estimate that each person dying of

tuberculosis represents an actual financial loss of $2,175. This multiplied by 1,411 gives us the appalling sum of $3,048,925.

But I now come to consider the cost of disability. In Maryland, in studies which have been made of invalidism as the result of tuberculosis, it has been found that a period of one year and six months of total disability has been preceded by a period of one year and seven months of partial disability, during which time the workman was unable to earn more than half wages. This is based on a study of wage earners. Mr. Christopher Easton in a study of 100 cases on Blackwell's Island, New York, found that the average duration of the disease was seven months and twenty-one days before the patient's admission and the average period of unsteady employment was three and one-half years. The figures are modified somewhat by reason of unsteady employment, due to dissipation or some other cause not consumption. Taking Maryland's findings of total and partial disability, an average of three years and one month, it is believed that this period of disability is much increased among the well-to-do owing to the fact that the working man is found to exert his last ounce of strength, after which his disease runs its course much more rapidly than his more favored brother.

So far as I am aware, there are no exact figures to show the period of total and partial disability due to this disease, yet I think it safe to assume that on the average at least three years elapse between the inception and the fatal termination of the disease.

I find in consulting the Sanatorium records for the biennial period ending June 30, 1910, that the patients admitted had knowledge of the disease before admission as follows:

3.3 per cent less than three months.
6.5 per cent less than six months.
19.7 per cent less than one year.
23.5 per cent between one and two years.
31.0 per cent for periods varying from two to five years.
10 (plus) per cent from five to ten years.
4.5 per cent for periods varying from ten to twenty years, or longer.

The period of disability therefore for the 1411 as based upon the Sanatorium records shows that patients were disabled for periods as follows:

47 for three months.
100 for six months.
277 for one year.
331 from one to two years.
437 from three to five years.
153 from five to ten years.
63 from ten to twenty years.

The invalidism represents total losses for classes as follows:

| | |
|---|---|
| First and second classes | 55 years |
| Third class | 277 years |
| Fourth class | 622 years |
| Fifth class | 1966 years |
| Sixth class | 1147 years |
| Seventh class | 945 years |
| Or a total of | 5052 years |

There are various estimates as to the average income. Irving Fisher of Yale places the average income at $600.00, but to be conservative I place the average income at $300.00 as representing the average for a decreasing in earning power or its loss altogether due to tuberculosis. It will be seen therefore if these figures are accepted that the cost of the disability sustained last year in Iowa was approximately $1,515,600.00. I we add the cost resulting from disability, $1,515,600.00, and the cost resulting from actual loss of life, $3,048,925.00, we have the appalling sum of $4,564,525.00 as the tribute levied in Iowa, in 1910 by tuberculosis. And it must be remembered that these figures are within the actual facts and that they are in nowise exaggerated.

Prof. Irving Fisher of Yale University concludes that we have 3,000,000 persons seriously ill of whom 500,000 are consumptives. He says fully one-half of this illness is preventable and that the economic gain from preventing preventable diseases would exceed one and one-half billions of dollars.

I have not attempted in the limits of this paper anything but perfunctory discussion. I know that we are slowly arriving at an understanding of human values. Medical science has been achieving not only in surgery and internal medicine, but in the great field of preventive medicine. The high priests of public health are calling the multitudes to repentance for the sins of insanitation and uncleanness and six years in the work of prevention assures me of the ultimate triumph. The biological engineer has become the angel standing at the gateway of death with the flaming sword. He is the Apocalypse of a new era among men.

Finally, it is the people's business as all preventable diseases are social. The next great step will, in my judgment, be a recognition of the absolute necessity of a federal department of public health. Economically considered, we can no longer afford to pay the price of our neglect.

## OBSTRUCTION OF THE COMMON BILE DUCT DUE TO CANCER OF THE AMPULLA.*

J. W. RICHARDS, M. D., MECHANICSVILLE, IOWA.

Cases of cancer at the terminal portion of the bile duct within the duodenal wall are sufficiently rare and the signs are sufficiently characteristic to warrant the following report.

Jaundice and pain are the most frequent signs of disease of the bile passages, jaundice belonging especially to common duct disease. Musser found it present in 17 of 18 cases of cancer of the ducts and pain in 12 of the 18. In gall bladder disease jaundice is present in but 20 per cent of the cases. In 16 cases of cancer of the ampulla on record, jaundice has occurred in all, while pain is mentioned as present in but three, and then of an aching or general abdominal character. This may be partly explained by the fact that when the ducts are the seat of cancer he found a history of gall stones in but 18 per cent of 25 cases, while various authors gave from 69 to 95 per cent of gall-bladder cancers as showing gall stones.

Occasionally the jaundice is due to a lesion, in itself of no consequence, but so placed as to obstruct some important function of the body, as for instance, cancer of the tip of the bile duct, or some kinking at this point. There have been described by a number of authors such primary cancers which originated in the mucous membrane of the ampulla of Vater, the clinical picture of which they claim to be distinctive.

The following case is of interest as one of this class of painless jaundice: A male, 66 years of age, a farmer, came in April 1910, complaining of some jaundice which had developed rapidly, within a few days, without pain. This painless condition, loss of flesh and frequent bowel movements were the first evidences to him of any illness, but on further questioning, the following details were obtained:

Some two or three years before, he first noticed a tendancy to looseness of the bowels. This condition existed for several months, with intervals of some slight indigestion, at times, when at the end of 6 or 8 months later, the stools became pale-colored, "putty-like," foul-smelling, small in amount and unsatisfactory.

By the end of the first year, and for some time afterwards, they occurred once or twice during the night, and three or four times during the day. About six or eight months later he noticed a very slight soreness just below the eighth costal border, which continued more or less until he came to me.

*Read before the Cedar County Medical Society, Stanwood, Iowa, December 13, 1911.

Shortly before consulting me he first noticed jaundice, severe itching and dryness of the skin. He had lost some 30 or 40 pounds in weight, his usual weight being 180 to 190 pounds. He felt energetic, active, appetite fair, and complained of nothing but the jaundice. I therefore suggested that he go with me to Cedar Rapids and consult Dr. G. E. Crawford, but on arriving found the Dr. out, and we therefore called on Dr. Murphy who with his assistant Dr. Neuzil, took the case under their care.

His family and past personal history were negative. He had never had a venereal disease nor had he used alcoholics very much. He had never been troubled in any way with indigestion, until the last few years, and then only slightly; nor had he ever had bilious colic, a previous jaundice, nor any serious pain or discomfort referable to the abdomen.

Physical examination at this time showed temperature slightly abnormal, pulse 68. thoracic and abdominal organs presented nothing abnormal except the liver, the upper border of which was in the sixth, eighth and tenth spaces, but the lower edge could be felt rounded, two fingers breadth below the ribs. The gall bladder was outlineable to percussion and palpable as a pear-shaped, slightly tender body, pointing toward the umbilicus.

The urine was acid, Sp.. Gr., 1024, dark coffee colored, and contained a trace of albumen, no sugar, large amount of bile pigments, many large and small hyaline, cellular and pigmented casts, a few renal cells and leucocytes.

Drs. Murphy and Neuzil made a blood count, which showed 6,600 white cells and 5,600,000 reds, with a hemoglobin index of 74 per cent. The patient was given a test meal and the contents examined, also a course of lavage, which disclosed a lessened number of digestion leucocytosis being present, the count being far below 10,000.

Patient remained at the hospital for about 10 days, then returned home, the jaundice having subsided, yet patient appeared sallow. I treated the patient for two or three months, that is he took medicine gotten at the office, seemed to gain slightly, went about, but seemed never to be free from some peculiar feeling in and about the region of the stomach, in fact this condition kept increasing, more or less, worse at times and then better.

In November I was called to see patient at his residence, and found him considerably weakened, emaciated, color jaundice like, unable to take but very little nourishment, as he had no appetite,—belched a great deal, bowels rather tardy, and of a light color, in fact he was now obliged to take something to assist the bowels. There was pain of a dull character which became sharp at times. I left some medicine

at this visit and advised him to go to Rochester, Minnesota, but patient said he would consider the matter and let me know. In a few days Dr. Baker of Stanwood was called, made an examination, and I believe found that there was some malignant condition existing. The patient remained at home until December 26th, when I accompanied him to the Sanatorium at Anamosa, to be treated by Dr. A. G. Hejinian. Patient remained here two weeks, and returned home without much benefit, being too weak to undergo even an exploratory operation.

After returning home, patient remained on his couch during the daytime, and went up stairs to bed at night, until the malady became worse, and then remained down stairs on his couch until he died, February 21st, at 4:30 A. M. having a nurse with him scarcely 24 hours, because he wouldn't consent to have one any sooner.

A summary of his history is:

Nearly three years ago frequent putty-like pale colored stools.

Six to eight months later soreness at right costal border.

In April, 1910, a sudden painless jaundice, rapidly deepening in a very short time.

Loss of 30 to 40 pounds in weight in one year.

Death three years after the onset.

No autopsy was held in this case, as the family refused one, however it would have enabled us to ascertain the exact condition for diagnostic purposes for sure, but suffice to say that the symptoms and history warrant us in the diagnosis of obstruction at the terminal portion of the common Bile Duct.

We know that the bit of duct between the junction of the common bile duct and the pancreatic duct and the bile papilla in the duodenum is called the ampulla of Vater. It is contained almost entirely within the duodenal wall as it passes obliquely through it. It is of slightly greater diameter than the bile duct above and the orifice below. Its length as measured by Opie, varies from 0 to 11 mm. He reports in 11 cases in 100 the pancreatic duct opened on the duodenal surface by a separate orifice. This small duct common to the pancreatic juice and bile is the cavity in which gall stones occasionally lodge and is the second most frequent seat of beginning cancer of the ducts.

Hanot speaks of such an orificial cancer occurring at the point of transit between two types of epithelium. It is also interesting to note that Klotz, in one other case of such a cancer, described as the above, found an abnormality in the duct formation.

The occurrence in an adult of a painless, rapidly deepening jaundice, without previous attacks of billiary colic and without fever, is the simplest form of duct obstruction with which we have to deal. It leaves no doubt as to the obstruction of one or more of the bile ducts

either from disease within them or from pressure, or constriction from neighboring organs. Of the former we have catarrhal jaundice, cancer, stricture, parasites and gall-stones to consider.

Now a catarrhal jaundice occurs usually in children and young adults, is generally preceded or accompanied by gastric catarrh and fever and, above all, runs a shorter course of three to four weeks. However, Quincke remarks that "in old people an attack of simple catarrhal icterus may end fatally from long-continued stasis of bile." In such a case the diagnosis from a primary duct cancer without exploratory operation might be possible.

Gall stones have been reported by several authors as slipping into the neck of the gall bladder or even into the common duct and there causing a painless obstruction by pressure. This, occurring without previous attacks of pain referable to gall stones or gall bladder disease, must be considered extremely rare. Fenger and others speak of a parasite, an echinococcus or intestinal worm becoming lodged in the duct. These are rare and but need to be among the old files of our diagnosis scheme. The presence of parasites in the stools or mode of life possible to echinococcus infection would be suggestive.

Of cancer of the bile duct Hanot groups the facts most clearly when he says: "Chronic progressive jaundice, apyretic, with decoloration of the fecal matter, no sharp pain, moderately enlarged liver, emaciation till death, five to nine months later, is characteristic of cancer of the tip of the common duct."

The attendant train of impaired digestion and absorption; the cholemia resulting in the nephritis, as well as the specific toxic effects, and the serous membrane inflammations to which these patients are liable, all contribute to a loss of flesh and a lowered vitality, which in itself may bring the end or pave the way for intercurrent acute disease.

Hence an early diagnosis is essential and where the first sign of a disease is so definite as in this condition we may hope for much by early surgical intervention. I do not mean to say the first signs are diagnostic of anything but common duct obstruction, but after a reasonable time of from 3 to 5 weeks for a possible catarrhal jaundice to subside, exploratory operation is indicated.

Of painless obstructions from without the duct we may have tumors of the pylorus, duodenum, pancreas, kidney, suprarenals, of the liver, of enlarged glands along the ducts and of echinococcus disease of any of these organs.

Of tumors of surrounding organs, if they had not caused sufficient pain to attract attention before causing duct obstruction, they would give signs such as a palpable tumor, gastric dilation, signs of ulceration, etc., but in the pancreatic head there may occur a painless simple

fibrosis, a scirrhus tumor, or a cyst capable of obstructing the choledochus as it passes by or through it.

Opie has clearly shown the relation which may exist between obstruction of the choledochus below the duct of Wirsung and pancreatitis. This pancreatitis frequently persists owing to a chronic inflammatory thickening or an edema of the ducts long after removal of the obstructing cause. From this we have a protracted period of impaired intestinal digestion which, in a patient of low vitality, may end in death.

We may be able by the aid of a better knowledge of chemistry of the digestion and by further analysis of the urine and feces to make accurate diagnosis in this group of cases, but until that point is reached early exploratory operation with its practical absence of mortality is justified.

The cause of death in the majority of cases, in so far as I can find in looking through literature on this subject, has been the cholemia. With a better knowledge of the direction of the lymph flow from this region, early and free extirpation of growths, not only of the lower bile duct but of the duodenum, may bring good results, especially since these tumors do not form early metastases.

Mr. Mayo Robinson has suggested that cancer originating at this point is much more frequent than heretofore considered.

---

**EVEN.**

"I find that my husband has been having the office boy call me up every day, and mumble terms of endearment. He's been going to the ball game."

"How is it that you didn't catch onto the voice?"

"Well, I'm busy at bridge every day, and I've been having the cook answer the telephone."—*Washington Herald.*

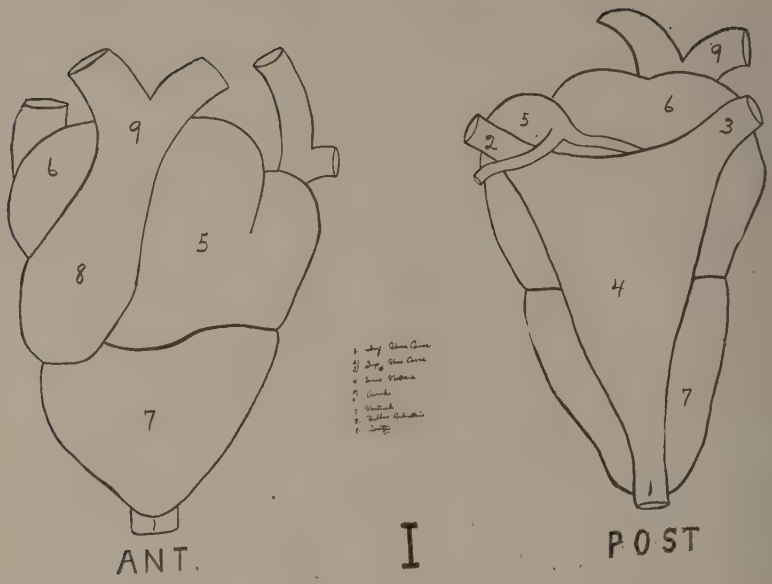
## PATHOLOGICAL PHYSIOLOGY OF THE HEART.*

W. L. MENDENHALL, M. D., DES MOINES, IOWA.

From earliest times the heart has been an object for curious investigation. Almost as numerous as the investigators have been the functions or properties assigned to this wonderful organ. It has been referred to as the vital spot of life, the fountain of joy, hard as rock in the very wicked, and soft as mush in the young lover. In fact loves abode has been assigned to the heart. From earliest times, too, pathology of the heart has been recognized even among the laity, for who has not heard of the sore heart or the broken heart and not infrequently is cure of such pathological conditions hinted at by the lay press when we read of the soothed or the healed heart or the application of heart balm when an estranged couple have consultation with our local divorce judge. It is not strange then that the heart has been the object of such intense study and research. Furthermore the inaccessability of the organ has greatly stimulated the scientist to his keenest effort. As a result of such work we have before us the names of many men who have literally carved their monuments out of the human heart, such for example as Harvey and Engleman, Gaskell, Lewis, Erlanger, MacKenzie, Hering, Hirschfelder, Keith and Flack. Much has been accomplished by these men, much remains still to be accomplished. All branches of medicine are interested. The anatomist may go a certain distance in unravelling the mystery of the heart and then is baffled by lack of physical apparatus to complete his study; the physiologist attacks the problems but can go only so far when he becomes mired in the chemists colloid swamp or the physicists undetermined fields. Neurologists many times assume the position that heart lesions are in a cavity higher up and while not actual stumbling blocks to progress they unmercifully cool the ardor of some investigators. The pathologist could tell what is wrong if he could get enough specimens of the same kind, and the clinician could get enough cases of the same kind if he could only get the autopsies, so thus have the difficulties been the stimulus to such a volume of work on one organ. In taking up the pathological physiology of the heart, I shall confine the paper to those conditions which affect the heart musculature alone. The deranged functions in valvular defects are so well known that they will not be discussed.

We shall first describe the physiological anatomy of the heart and in doing this want to call your attention to chart 1. This is a vertebrate type of heart found in the frog. Fig. 1, Post. View is the Inf.

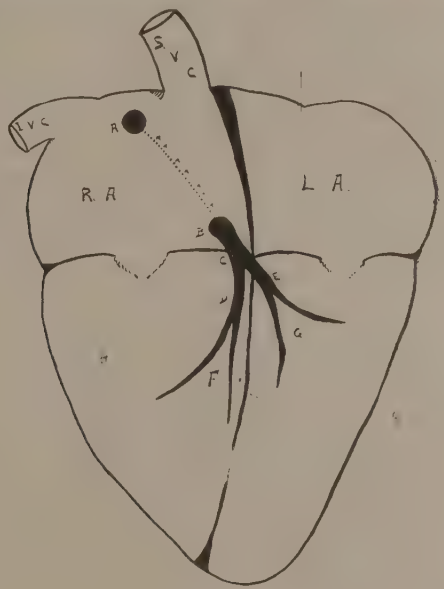
*Read before the Des Moines Pathological Society, March 8, 1912.




Vena Cavae. Figs. 2 and 3 are the Sup. Vena Cavae. These open into 4, a cavity called the sinus venosus. The sinus venosus opens into the auricles, 5 and 6. These in turn open into one ventricle, No. 7. The ventricle forces its blood into 8, Ant. View, known as the bulbus arteriosus, then the bulbus contracts forcing the blood into 9, the aorta. The sequence of events in this heart are as follows: The cycle begins with contraction of sinus venosus, contraction of both auricles, contraction of ventricle and ends in contraction of bulbus arteriosus. It will be noted that contraction begins in the venous end of the heart and is completed in the arterial end.

As we go higher in the animal scale the sinus venosus as a separate cavity disappears as does also the bulbus arteriosus, while a new cavity in the form of a new ventricle develops and there is no direct communication between right and left sides of the heart. In the human heart we find remnants of the sinus venosus and the bulbus arteriosus. In the human right ventricle the comus arteriosus is thought to correspond to the bulbus arteriosus, in the lower type, while a small amount of tissue located at the junction of the Sup. and Inf. Venae Cavae in the right auricle represents the sinus venosus. This locality will be mentioned later. Just as the heart cycle in the lower types starts in the venous end of the heart so does it commence in the human heart at the venous end. As to the above mentioned remnant of tissue, Keith and Flack have recently described its structure in detail and have given it the name of sino-auricular node or sinus node, regarding it as

a remnant of the sinus venosus. It consists of a small mass of highly developed mucular tissue. This is shown at A in Chart 2. The heart beat is now known to start in this particular sino-auricular node and since, as will be explained later, it is the most irritable portion of the cardiac musculature it has been termed the pace maker of the heart. Here it is that the impulse starts which sets the whole cardiac machinery to moving in a definite sequence. As the muscle wave travels from the sino-auricular node it encounters a bunch of specialized muscle cells in the inter-auricular septum just below the opening of the coronary sinus. This little bundle of tissue was described by Tawara and received the name Node of Tawara. In the literature, however, it




II

is as often referred to as the Auriculo Ventricular Node. It is seen at B in Chart 2. Leading from the auriculo-ventricular node and running along the top of the Inter-ventricular Septum is a small bundle of peculiar heart muscle tissue about 1.5 to 2.5 in width and about 18 m. m. long. This is known as Bundle of His or the Auriculo ventricular Bundle. Its general course is toward the aortic valves near which it divides into two branches, one of which, D, enters the right ventricle the other, E, the left ventricle. These keep dividing as they course along under the endocardium of the septum. These branches can be traced over the inner surface of the ventricles and were formerly designated Purkings fibres such as seen at F and G, in Chart 2. It is by means of the Bundle of His that the muscle wave or impulse is transmitted from

the auricles to the ventricles. One observer has described a definite bundle of muscle fibres extending from sino-auricular node to auriculo-ventricular node but I could find no confirmation of his work. Some describe the muscle tissue of the bundle of His as embryonic in nature while some say it is a highly specialized form of cardiac tissue. Let us now retrace the cardiac muscle wave. It originates in the sino-auricular node, travels through the auricular musculature and in this spreading reaches the auriculo-ventricular node.

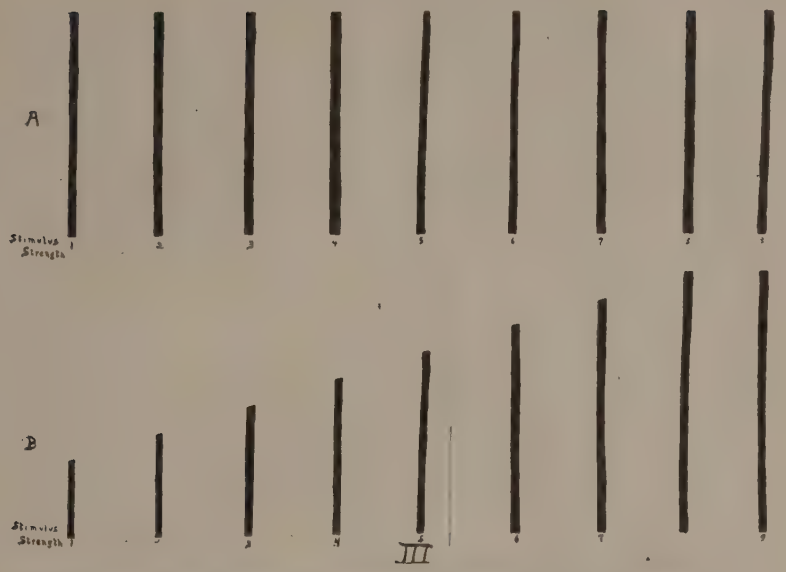
Here the wave is continued across the auriculo-ventricular septum by means of the bundle of His and through the extensive terminations of this bundle in both ventricles sets up contractions of their walls. Formerly it was thought that the heart contracted in all parts simultaneously, later the contraction was described as a peristaltic wave beginning at the base of the auricle and sweeping over the heart to the apex. It was generally supposed that it travelled directly through the septum between auricles and ventricles. Now we know that the only way it reaches the ventricles is through the above mentioned narrow muscular bridge, the bundle of His. This is believed to be the chief cause of the distinct pause between auricular and ventricular systole, for experimentally it has been shown that conduction through a narrow muscular bundle is slower than through a broad muscular band. The functional value of this short pause is obviously to permit of thorough filling of the ventricles. Now let us see what the heart musculature itself depends upon for its functional integrity.

The conditions here mentioned are not confined to the heart alone but are found in other musculature of the body, the only difference being the degree of development. We recognize five chief functions residing in heart tissues. First it possesses irritability. By this we mean that it has the power of responding to various stimuli, e. g., electricity, solutions of inorganic salts, and various mechanical stimuli, such as pinching, pricking, stretching, etc. One point I wish to emphasize here in regard to irritability of heart muscle and that is, its variation in different parts of the heart. The base of the heart is much more irritable than the apex, for instance, a certain strength of stimulus that would just cause contraction of the auricle would fail to excite the ventricle, i. e., it takes a stronger stimulus, always, to make the ventricle contract than it does the auricle. In the auricle itself it takes a stronger stimulus to cause contraction in a strip of muscle taken near the ventricle than it does in a strip taken near the entrance of the great veins. In other words irritability (or power of responding to stimuli) is greatest at the base of the auricle and to be more specific is greatest in that mass of tissue known as the sino auricular node. For this reason the sino auricular node is spoken of as the pace maker

of the heart. This portion being the most sensitive, so to speak, is the first affected by a stimuli and starts the muscle impulse that spreads through the rest of the heart. A second great function of heart tissue is contractility. By this we mean the power of entering into contraction. Obviously this must depend upon the first mentioned property, irritability. For if the heart were unirritable we could not have contracility, conversely if by applying stimuli we fail to get contraction the natural conclusion is that irritability has been lost. A third function of heart muscle is conductivity. By this we mean the power of propogating the muscle impulse from one fiber to another. It is upon this property that the spread of the contraction from the sino auricular node to apex depends. If you recall the histological structure of heart muscles you may readily see how this property may be better developed in cardiac muscle than in skeletal muscle. A fourth property of cardiac muscle is rythmicity. By this term we mean the power of responding to continuous stimulation by a series of repeated contractions. Smooth or skeletal muscle if stimulated continuously enters into a condition of continued contractions, the heart in response to the same stimulus would not enter into continued contraction but a series of contractions and relaxations. In other words it is impossible to throw the heart into tetanic contraction. Another point must be emphasized here. Rythmicity like irritability varies in different parts of the heart and like it reaches its highest development in the basal region of the organ, e. g., continuous stimulation of the ventricle alone may provoke rythmical contractions numbering thirty per minute while the same stimulus applied to the auricle may produce ninety contractions per minute. Auricular influence therefore keeps the ventricle beating faster than it otherwise would were it not connected to the auricle by the bundle of His. The greatest rythmicity is found in the region of the sino auricular node. Afifth property of cardiac tissue is tonicity. By this we mean its ability to remain always in a state of slight contraction. All muscles of the body possess this property. No muscle of the body in health ever relaxes completely. In the condition which we ordinarily designate relaxation there is a slight contracted condition of the muscle. I shall not discuss its value in skeletal muscle but want to remind you of its physiological value in hollow viscera, e. g., the cavity of a viscus or caliber of a blood vessel is continually changing due to this property of tone. I mean the cavity may be enlarged without apparent muscular relaxation, or may be diminished without apparent muscular contraction. Tone then in a hollow viscus regulates the size of the cavity. Some specific example may make this clearer. You are all familiar with the little dog intently watching a hole in expectation of a rat making its appearance, and you must have noticed the trem-

bling of the limbs. This is an example of increased tone. It affects the whole musculature but they do not enter into what is usually designated as contraction. Again you are familiar with the nervous patient who must empty the bladder and his chagrin when showing you a specimen consisting of one or two ounces; or you have all noted in certain nervous individuals this desire to urinate which, if it is not satisfied, and the patient is relieved from excitement, may pass off not to return perhaps for hours. This is due to variations in bladder tone. Increased tone diminishing the cavity of the bladder produced the desire to micturate, later on diminished tone enlarges the cavity and the desire passes off. The effect of psychical stimuli is apparent in regard to tone. In the heart the property of tonicity is most highly developed in the basal region. I use the term highly developed here in the sense of continuous and extensive variation. In addition to these five properties I want to briefly refer to the so-called automaticity of the heart. Not so much to include it as to exclude it. We say an organ is automatic when it enters into activity without any apparent stimulus. For instance a heart freed from the body and blood and nerves may go on beating for a long time. We then say it is automatic because we can't see the stimulus that causes it to contract. We know however that with every contraction chemical products are liberated in the cells which may constitute the stimulus for successive contractions. I am unable to find anywhere in scientific investigations where any tissue is endowed with absolute spontaneity, and am led to conclude that the heart is not an automatic organ. This naturally suggests the question what is the inner stimulus which by its continuous action keeps up the rythmical activity. This is a question that is unsettled at the present time and like all obscure problems is shrouded in theoretical explanations. Some investigators think it is due to the pressure of blood in the heart, some to the composition of the blood or lymph bathing the cardiac cells. All have good arguments to support them. The weight of authority are inclined to regard the compositions of the blood as the chief factor and especially the inorganic salts of the blood. Those who believe it to be the inorganic salts of the blood that constitute the inner stimulus are divided. Some think it the calcium salts. Some the sodium salts. A safe position to assume in this theory is that both salts constitute the inner stimulus.

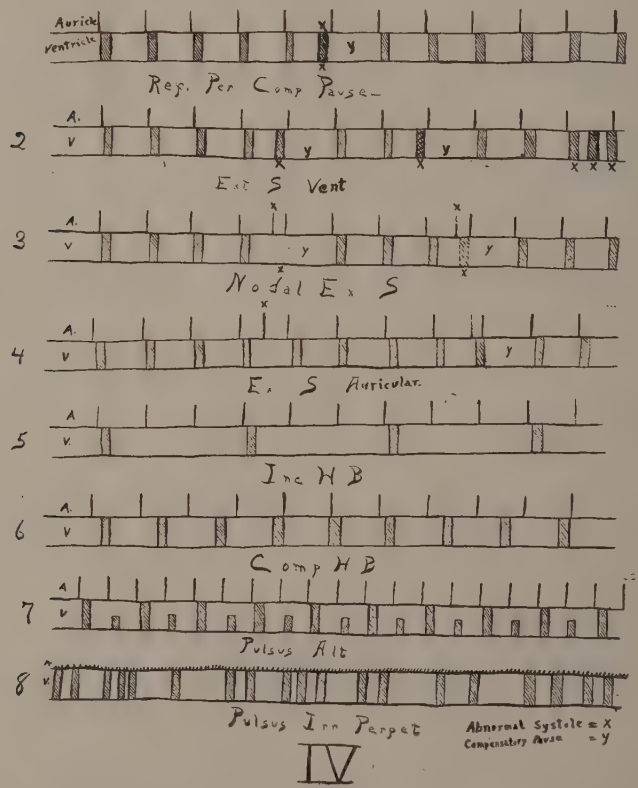
I now want to direct your attention to two phenomena of heart muscle that are characteristic and that are most important in explaining the pathologic physiology of the organ. First the all or none law of the heart. By this we mean that when the heart contracts at all it does so to the fullest extent that its condition at that time will permit. For instance if by experiment you find the weakest stimulus that




will produce contraction in the muscle and record that contraction and then increase the stimulus to a very strong one and record that contraction, you will find that the heart contracted just as effectively for the weak stimulus as for the strong. In other words if the heart contracts at all it contracts for all it is worth at that particular time. This phenomena is not present in other tissue and I call your attention to Chart 3 which is a reproduction of records made by Drake students a few weeks ago. A, represents the heart contractions beginning with a stimulus just strong enough to produce contraction and ending with the strongest that could be produced with induced current from one dry cell. B. represents a similar process except skeletal muscle is used instead of heart muscle. You will note in B. the increased height of contraction with increased strength of stimulus.

Another phenomenon that I wish to call attention to is the refractory period of the heart. If while the ventricle is in systole we stimulate it artificially there is no response to the stimulus, if we stimulate it during diastole it responds by an extra contraction and then this is followed by a long pause and then falls in again after the auricular beat in its normal rhythm. The pause is spoken of as the compensatory pause. The period at which a stimulus was inefficient is called refractory period, Chart 4,. Fig. 1. This leads to but one conclusion viz. that during one phase of the hearts action one important property (or power of response to stimuli) is completely abolished. This refractory period occurs during systole. Irritability is lost throughout systole but immediately begins to return during diastole, so

that as diastole proceeds irritability increases until the following systole abolishes it again. These two phenomena viz., all or none law and refractory period are important anchors for the clinical physiologist to tie to in explaining some pathological conditions of the heart. I have tried to give the trend of modern opinion in regard to functional activity of the heart muscle and have purposely said nothing about the neurogenic theory of the heart beat because the weight of authority at present leans toward the myogenic theory. I have also omitted to mention the extrinsic nervous control as your familiarity with the subject is self evident.




Now let us glance over the field and see where it would be possible for pathological changes to take place, then we will take up some of the conditions, which the clinician finds, and seek the explanation in terms of derangement of the normal physiology. Where possible we shall verify this by presentation of anatomical pathology. From what has been said, it is very evident that altered conditions in any of the following structures would give rise to derangement of function, viz.: sino-auricular node, bundle of His and branches, auricular or ventricu-

lar musculature. So too would changes in the five important properties of the muscle, viz., irritability, contractility, rythmicity, conductivity and tonicity produce deranged function. Whether diseased or not the heart seems always to follow the all or none law and to exhibit the refractory period. Before presenting the clinical phenomena in regard to the heart I wish to invite the criticism of this honorable society upon the use of two terms which as far as I know are not extant. I have coined them for my own use because I could not always reconcile myself to use of certain terms which are used clinically to designate certain heart conditions. Ordinarily the term bradycardia is applied to that condition in which the radial pulse or apex beat is slower in rate than the normal, and tachycardia to that condition in which the above rates are much increased. The termination of the words would indicate a condition affecting the whole heart, but clinically we find that this may not be true; the ventricle may be slow and the auricular rate fast or indeed the opposite condition is not an impossibility. Therefore, I have adopted the term pseudo-bradycardia for that condition in which the ventricle is slow and the auricle rapid or normal, and pseudo-tachycardia for that condition in which the ventricle is fast and the auricle beat perchance absent. I would restrict the use of bradycardia proper or true bradycardia to that condition in which the whole heart sequence was retarded and true tachycardia to that condition in which the whole sequence was accelerated.

Changes in the physiology of the heart muscle must necessarily disturb the rhythm, so in order to take up the pathologic physiology in order, I shall adopt Wercklebach's classification or arrythmias. He divides them into two groups, viz.; true arrythmia and pararrythmia. We shall consider true arrythmias first. A true arrythmia is one in which the fundamental sinus rhythm of the heart is disturbed. The rate may be fast or slow, resulting therefore in a true tachycardia or a true bradycardia. We know that the rate of discharge of impulses from the sino-auricular node is governed by the vagus and accelerator nerves. Hence, true arrythmias are usually associated with disturbances of the central venous system e. g., meningitis. Other examples of true arrythmia are during the respiration and also during the act of swallowing. It is unusual for any serious symptom to result from this form of arrythmia in itself. The heart evidently is only indirectly affected through its extrinsic nerves.

We will now take up the pararythmias. This is a condition in which the sino-auricular rhythm is not of necessity disturbed, but is obscured from time to time by various untoward conditions. One of the most common of these arrythmias is the extra systole. MacKenzie's definition of extra systole is as follows: "An extra systole is a pre-

mature contraction of auricle, ventricle or both in response to a stimulus produced at some abnormal point of the heart, but where otherwise the fundamental or sinus rhythm is maintained." A pulse marked X, represented from such a case is shown in chart 4, figure 2. A positive explanation has not been made, but from the physiological side might be explained as either an alteration in the inner stimulus, a shifting of heightened irritability from the sino-auricular node to auricular wall, ventricular wall, or node of Tawara or a mechanical or chemical stimulus perhaps in the nature of a toxine. Where one extra systole occurs the pulse is sometimes called pulsus Bigeminus, if two extra systole occurs the pulse is called pulsus trigeminous. When the extra systole originates in node of Tawara the muscle wave extends down into the ventricle and up into the auricle where it reaches the sino-auricular node and coming in contact with the normal stimulus material that has been accumulating here, destroys it, and as a result the sinus node must wait a normal interval before it can again initiate a cardiac contraction. The compensatory pause in this instance is shown at Y. This is sometimes called nodal extra systole. This variety is seen in Fig. 3, Chart 4. Where the extra systole originates in the auricular muscular, the compensatory pause may or may not occur in this instance, depending upon where the auricular extra systole occurs, the first one shown in Fig. 4, shows no effect on ventricle because it was still refractory, the second one in Fig. 4 shows a premature ventricular contraction with corresponding compensatory pause. In all these forms of extra systole the heart as a whole invariably maintains its fundamental rhythm. Another form of pararythmia is heart block. This is divided into two groups, namely, complete and incomplete. In complete heart block the ventricle beats with a rhythm of its own and is slow, perhaps 20 or 30 per minute; the auricle likewise has its own rhythm, is fast, usually 75 to 95. In this condition there is no definite ratio between the number of ventricular and auricular beats. Each has its own rhythm. In incomplete heart block the ventricle may beat every second, third, fourth or tenth, etc., beat of the auricle. There is a definite ratio existing between the rhythms. It is frequently spoken of as a 2 to 1, or 2 to 3 rhythm. Chart 4 shows at Fig. 5 a tracing representing incomplete heart block with 3 to 1 rhythm and at 6 complete heart block. The deranged function in heart block is probably better known than is that of any other condition. In these cases the conductivity of the heart is impaired and especially conductivity in the node of Tawara and bundle of His. Cases in which heart block was recognized and where post mortem examinations were made in the majority of cases show definite lesions in Tawara's node or bundle of His. The nature

of these were fibrous, gumma, or degeneration. Additional evidence that the conducting system is at fault was furnished by the classical work of Joseph Erlanger upon the dog. By means of a clamp he succeeded in compressing the bundle of His. He found that with varying degrees of pressure he could produce at will any form of incomplete heart block, and by making strong compression of the bundle could produce complete heart block. The phenomena is readily induced in frogs and turtles and is used now in most physiological laboratories to demonstrate the function of the bundle of His. This form of heart block I would designate as pseudo-bradycardia.

Another type of arrythmia is pulsus alternans. This is a strong pulse followed by a weak one. A tracing of such a pulse is shown at 7 in Chart 4. It usually occurs when the heart rate is rapid. It frequently disappears when the heart slows down. Sometimes a clinician describes a case as pulsus alternans when it is simply recurring extra systole. The cause of pulsus alternans is an impairment of the property of contractility. Through weakness the power of contraction is lessened. When a forcible contraction occurs it continues somewhat longer than normal and does not allow a sufficient rest period to intervene so that the power of contractibility is not fully restored following the first beat when the second beat occurs; as a result it is a short weak contraction. Pulsus alternans is a rare condition and usually indicates severe cardiac exhaustion.

Another form of arrythmis is Pulsus Irregularis Perpetuous, or absolute irregularity. In this condition the fundamental rhythm is entirely wanting. It is indicative of grave heart affection such as occurs in the late stages of chronic endocarditis of rheumatic origin. The venous pulse tracing is ventricular in form, the "a" wave is absent. MacKenzie in attempting to ascribe a cause for this said that the starting point for the heart cycle was transferred from the sino-auricular node to the auriculo-ventricular node and that the impulse traveling in both directions from this point caused both ventricle and auricle to contract simultaneously. He applied the term nodal rhythm to this condition. Later on he modified this view considerably, for by means of electro-cardiagraphic tracing it was found that the auricle showed from 450 to 900 undulations per minute. The polygraph was not sensitive enough to detect any auricular changes. An autopsy reported in the last number of "Heart" upon one of MacKenzie's own cases shows the following changes microscopically, "profound lesions in the sino-auricular node, interstitial myocardial lesions in auricles and ventricles, but more especially in right auricles, with but slight changes in the auriculo-ventricular node and branches." MacKenzie and others now agree that this form of arrythmia is due to auricular fibrillation.

This is a condition in which the auricle never really contracts, but appears as though it is balooned out while the wall is in a quivering wavy condition. This has been observed in horses frequently and they seem quite susceptible to this condition, experimentally it may be produced in animals by artificial stimulus of the auricle or a similar condition may be produced in the ventricle. The animal may recover from auricular fibrillation, but not from ventricular fibrillation, as the circulation would necessarily stop during such a process. Auricular fibrillation has never been observed in man, but evidence of the electro-cardiograph leaves no doubt that it does occur. I have attempted to show by chart 2 how the irregular rhythm is produced since the auricle is in such rapid contractions it must be continually bombarding the ventricle through the bundle of His with muscle impulses. Some of these impulses must necessarily strike the ventricle during the refractory period. In that case they would be ineffective, others may enter the ventricle just when irritability was returning and since the muscle had such a short rest, may give a weak contraction, thereby following the All or None law. A long interval may now elapse before another impulse is effective. The impulses in green marked with a red cross are supposed to be effective impulses, those unmarked ineffective. The ventricular rate is always rapid. Auricular fibrillation may also be accompanied by imconduction in the bundle of His; in that case the ventricular rate would be slow. The cases of auricular fibrillation that have been examined microscopically have all shown lesions in and around the sino-auricular node, chiefly fibrosis in nature. Impairment of the tonicity of the heart does not give rise to any characteristic irregularity. Failure of this function gives rise to greater or less degrees of cardiac dilatation.

In summing up: all the places mentioned above where pathologic lesions may occur have shown lesions, viz., sino-auricular node, auricular, musculature, auriculo-ventricular node and bundle of His and ventricular musculature. Of the cardinal properties all show involvement in greater or less degree. Some of the explanations are not as clear as we would like, but this is due largely to inability to test or detect the function of the heart in life. The polygraph is an important aid in testing heart function, especially the sequence. While the electrocardiagraph has gone the polygraph, one better, in that it tests both sequence and conduction. Both instruments are effective only in the hands of experts. Pulse pressure gives us an idea of the heart's contractile power, its rhythmicity is easily determined. Irritability must

of necessity be inferential while as yet the inner stimulus is inaccessible.

BIBLIOGRAPHY.

Journal A. M. A. 1908, L, 1246., 1910, LV, 1350, 1423., 1911, LVII, 1512, 1517, 1529.
Amer. Jour. Med. Sc. 1910, CXL, 644, 851, 1911, CXLI, 360, 826., 1911, CXLII, 558, 788.
Quart. Jour. Med., 1910, IV, 55, 145, 423, 435, 498., 1912, V, 265.
Arch. f. d. ges. Physiologie. 1910, CXXXV, I.
Arch. Int. Med. 1910, V, 583. 1910, VI, 380. 1911, VII, 137, 289, 322, 1911, VIII, 141.
Deutsche Med. Wchnschr., Leipz. u. Berl. 1910, XXXVI, 1939.
Internat. Clinics. 1910, 20, S., IV, 39.
Brit. Med. Jour. 1909, II, 1528, 1910, II, 1670, 1818, 1911, I, 121, 123, 423, 593, 1911, II, 810.
Heart. 1910, II, 102, 127, 170. 1910-'11, 11, 171, 177, 222, 241. 1911, 111, 1, 13, 23, 89, 99.
Kentucky Med. Jour. 1910-10, VIII, 2105.
Lancet, London. 1910, 11, 1830, 1911, 1, 19, 1911, 11, 1009.
New York Med. Jour. 1911, XCIII, 119, 1911, XCIV, 484.
American Jour. Anat. 1911, 11, 211.
American Jour. Anat. 1911, 11, 211.
Journal Anat. and Physiology. 1907, 41, 172.
Nagel, Handbuch d. Physiology. 1, 824.
Interstate Med. Jour. 1911, XVIII, 277, 552, 993.
Ztschr. f. klin. Med. Leipsig. 1911, XXXII, 737.
Medical Record, 1911, LXXIX, 802, 1502.
Tr. Ass. Am. Phys. Phila. 1910, XXV, 444, 490.
Virginia Med. Semi-Monthly. 1910-11, XV, 481.

## HIS PREFERENCE.

A distinguished eye surgeon tells a good story of his hospital days. Three other young, newly fledged oculists and himself were chatting in their quarters in the hospital when the conversation turned, as was natural in young men, upon the beauty of the different colors of eyes. One championed the superior brilliancy and sparkle of the blue eye; another the depth and fire of the brown, while the third was all for the clear, cool light of the hazel. After they had exhausted their eloquence, with the usual effect of confirming themselves in their original opinions, the fourth young sawbones suddenly broke in:

'I don't care a hang about your blue eyes, or your brown eyes, or your gray eyes! Just give me sore eyes and plenty of 'em—and I'll be happy!"

## A FULL REPORT.

One day an eight-year-old girl, who had been taught to report her misdeeds promptly, sought her mother with an aspect of grief, denoting great penitence.

"I broke a brick in the fireplace," the youngster explained between sobs.

"Well, that isn't beyond remedy," smiled the parent, "but how on earth, child, did you do it?"

"I was pounding it with father's watch."

—*Lippincott's.*

## CLINICAL SOCIETY OF NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

### Case of Tubercular Iritis.

E. S. THOMSON, M. D.

The case was interesting as one of primary tubercular iritis. The patient was an Italian, 21 years of age, two years in the country, he has three brothers living and well and one sister who died at the age of seven. No family history of tuberculosis. He reacted positively to the Von Piquet test but otherwise showed no evidence of tuberculosis.

Eye symptoms.—Besides the usual adhesions of the lense, he showed a well marked grayish nodule, projecting from the periphery of the iris, which is rather characteristic. The three growths on the iris which it is most important to distinguish are sarcoma, so-called gumma and tubercular.

Sarcoma is usually a dark distinct mark, which is characteristic. Gumma is usually on the margin, and is associated with a good deal of inflammation, but clears up very rapidly under mercury. Tubercle most frequently occurs at the limbus. In this case one can see a cheesy mass ,extending from the limbus to the adjacent structures. With the Von Piquet reaction and the clinical appearance, it seemed a fair clinical conclusion that it was tubercle of the iris.

These cases are generally secondary to some process of the lung, and the primary cases that have been reported, are open to question. The prognosis in this case appeared favorable and the patient will probably recover if properly treated.

In response to a query as to what treatment would be effective, Dr. Thomson said he had been impressed with the value of tuberculin, and would start that treatment immediately. He would take the precaution however of having a Wasserman test made. Surgical treatment was not indicated.

Dr. Lynch said he supposed that the same principals would hold good in this case as in other types of T. B. viz: Good hygienic surroundings and good food.

---

## STRANGULATED HERNIA OPERATED UPON UNDER COCAINE.

New York Polyclinic Medical School and Hospital.

Case presented by Dr. Robert Brennan.

Patient was a man of 41 years of age and is single. His hernia was noticed at birth, and for sixteen years he wore a truss. At sixteen he discontinued its use, but after four years became engaged in laborious work, and had to put it on again. One week ago the Hernia came down, and in spite of his efforts, he could not replace it. Three days after it came down, he began to vomit, and this continued for two days, until he entered the Hospital. He had a marked Mitral lesion, which suggested the desirability of Cocaine anaesthesia. On cutting down, the sac enclosing the Hernia was liberated, letting out bloody fluid, and a knuckle of black gut. Under hot applications to the gut,

the color became restored in about an hour and the wound was sewed up. His pulse promptly dropped from 140 to 100 after the operation, and has remained normal since.

Dr. Morrow said he had been interested in cases of strangulated hernia, from the fact that discoloration of the gut is often due to traction upon the vessels, and that time might be saved by promptly replacing the gut in the abdominal cavity. He had demonstrated that normal gut, when constricted at the femoral ring, for a short period of time, would promptly lose its color, and become black, and would regain it when shoved back into the abdomen. (Jan. 1912.)

---

## THE COLON BACILLUS.

R. T. Morris, New York (Journal A. M. A., March 2), suggests that the colon bacillus may be at the present time the chief regulator of population and cause of the decadence of old age. Bacteria, which formerly caused disastrous epidemics, are practically under control through the progress of preventive medicine, but other bacteria, and especially the one in question, are still carrying on Nature's plans of reducing excessive population. The reason that the activities of this group of bacteria have been so long ignored is that the methods of search for them are of recent development and do not yet cover all the field. While we recognize the destructive activity of the colon bacillus in gangrenous appendicitis, we do not so often trace its activity from this source to distant parts, such as infections of the pylorus or duodenum. From his point of view, the colon bacillus is often the original malefactor in these cases, though the adhesions that it produces in the upper abdomen are often overlooked by the physician. He believes it to be the frequent cause of ulcers of the stomach and duodenum and its activities in gall stone disease have also been recently recognized. Pancreatic disease and diabetes can also be thus produced, and the proliferation of connective tissue which it causes is, he suggests, also seen in most cases of arterioscerosis. The toxins it produces also attack the nervous system, and it may thus cause neurasthenia. If we are to assume that the colon bacillus is the cause arteriosclerosis, we can easily rank this organism with the tubercle bacillus in increasing the death-rate. Experimental injection of the colon bacillus into the circulation has caused spinal disturbances, and Dr. H. G. Harris has found it abundant in the urine of a patient with infantaile paralysis. One of these disorders, colon bacillus intoxication and infantile paralysis, may prepare the way for the other. One of the largest groups of cases in which the influence of the colon bacillus is overlooked by clinicians is the infections of the kidneys, and this is specially unfortunate since we can so readily control its growth in the urine by hexamethylenamin and benzoate of soda, as has been shown by W. H. Thomson. From the rectum it may readily affect the neighboring organs through the urethra and the vagina and be the cause of intractable leukorrheas, tubal infection, urinary incontinence and sterility. Its effects are sometimes so remote that it is not suspected, and Morris mentions as an instance a case of chorioditis cured by operation for appendicitis.

## THE BURLINGTON MEETING.

CHARLES P. FRANTZ.

Over against the eastward horizon there has arisen a new convention city. Greater Burlington, generous, always hospitable, considerate of the stranger within her gates to a degree that none leave her borders without becoming fast friends is this year to entertain the sixty-second convention of the Iowa State Medical Society.

As regards the scientific work to be done and the entertainment to be afforded the visiting Aesculapeans, the state officials, sectional chairmen and the Des Moines County Medical Society present a solid phalanx of medical men imbued with the determination that the great medical body of our commonwealth shall record the 1912 meeting as the happiest, best and most profitable in the history of the medical association of the state.

The scientific program, as it assumes shape, promises papers of greater value than in any previous year. The oration on Surgery is to be delivered by Samuel C. Plummer of Chicago. Professor George Dock of St. Louis, will give the address on Medicine, while Professor S. J. Kopetzky of New York, will present a thesis before the Eye and Ear section. Dr. Plummer's address will be on "Fractures of Long Bones;" Dr. Dock's on "The Movement For Exact Treatment," and Dr. Kopetzky's on "The Widening Boundary of Medicine in its Relation to Otology, Rhinology and Laryngology."

For quietness and acoustic properties the spacious assembly room of the Congregational church, where the general assembly convenes, has been pronounced the finest that has been provided for a like meeting in many years. The Commercial Exchange rooms are likewise ideal for the sessions of the house of Delegatees and for the Eye and Ear sessions. The meeting place of the general assembly is but two blocks from headquarters, while the Exchange rooms are almost directly across the street.

The local arrangement committee has plans well under way for an afternoon function and automobile trip for the Women Physicians of the state on Tuesday, May 7th, to be followed by an evening banquet at the new Hotel Burlington, the peer of any hostlery in the State. On Wednesday afternoon, May 8th, a similar auto trip will be given for the wives and other ladies accompanying visiting physicians, while a reception and musical or theatre party will be given on Thursday afternoon, May 9th. Following the President's address on the evening of the first day there will be a theatre party for all, at which several scientific films will be shown.

A river trip to Keokuk to inspect the power company dam was

planned, but because the project would consume an entire day and evening, it was found necessary to abandon it. In its stead the committee has decreed that on the evening of the second day the entire State Association with ladies will be entertained on board one of the palatial excursion boats of the upper mississippi river. A reception for the officers of the State Association will be held en route, while one of Burlington's celebrated bands will enliven the hours on the waters with a mixed program of popular and classical selections.

Hotel accommodations, which for so many years ostracised Burlington as a Convention city, are now at once ample and attractive. Headquarters will be established at the new Hotel Burlington where accommodations are already being reserved for the meeting. It has accommodations for three hundred and fifty guests with a reserve capacity of seventy-five, a total of four hundred and twenty-five guests with rates from $1.00 to $3.00 per day.

The Hotel Delano has been rejuvenated, remodeled and refurnished, and has accommodations for two hundred and fifty with rates $1.00 up. The Union Hotel, with its refurnishings and in a new dress throughout, will care for one hundred and twenty guests on a fifty-cent rate.

From the west the C. B. & Q. trains arrive at 9:06 and 10:45 a. m., 2:15, 3:22 and 10:00 p. m.; departing at 10:50 a. m., and 2:38, 10:00 and 11:17 p. m. From the north and northwest the C. R. I. & P. trains arrive at 7:00 a. m., 1:40, 6:35 and 10:40 p. m.; departing 9:15 a. m.,3:30 and 9:15 p .m. The C. B. & Q. from the north and northwest arrives at 11:45 a. m., 2:50 and 9:05 p. m.; departing at 3:50 p. m. Trains from the south over the St. L. K. & N. W. arrive at 9:05 a. m., 3:22 and 8:55 p. m., and depart at 7:00 and 11:20 p. m. From the south and southwest over the C. B. & K. C., train arrives at 7:00 p. m., and departs at 7:45 a. m. The M. N. & S. from the north arrives at 11:05 a. m., and 3:20 p. m.; departing at 8:00 a. m. and 4:00 p. m.

Our visiting friends from Illinois will have occasion to arrive in Burlington from the north at 9:00 p. m.; from the south at 10:30 a. m.; and 12:25 p. m.; from the east at 5:15, and 10:45 a. m., and 2:33, 6:40 and 9:51 p. m., with convenient trains for returning home.

Only the principle trains are here taken into account, most of the late night and early morning arrival trains being omitted while the departing morning trains are in almost every instance likewise omitted. Daily river service affords those along the Iowa and Illinois border from the north and south, opportunity to reach Burlington about 9:30 a. m.

Burlington is the oldest city in the state and has always played a

prominent part in the history and in the politics and policy of the commonwealth of Iowa. It has always been a leader in health problems and the medical fraternity has never failed to send a large and able delegation to every state meeting, no matter how distant. It is a settled policy on the part of the rest of the state to show to the entertaining society its appreciation of this fact, and the determination throughout the state, as reported indicates that the attendance will eclipse all previous years.

The placid waters of the attractive Mississippi with its incoming and outgoing steamers and ever dotted with white canvas sails and with launches darting here and there over the glistening surface; the enchanting scenery of the splendid park at the southern extremity of the city with its broad drives, its shady nooks, expanding green swards, commodious forests of flowers, the maize, the lake, play grounds and the picnic rendezvous; the picturesque Country Club, country drives, etc., are sufficient attractions, without the special entertainment provided, to entice the wife of every physician and surgeon to accompany her husband to the 1912 meeting.

Burlington's Medical organization is one of the oldest in the State, having been organized in 1873 and christened as the Medical Society of Des Moines County, Iowa. The Fraternity was called together to take proper notice of the death of Dr. John F. Henry. Dr. Philip Harvey acted as chairman of the meeting and after attention was given to the specific purpose for which the meeting was called, Dr. W. W. Nassau made the initial motion which brought into existence the local society which this year celebrates the thirty-ninth anniversary of its birth. Of the nineteen signing the Constitution, but three are living. Dr. Geo. B. Little is still in practice in Burlington. He was chairman of the committee which drafted the Constitution and By-laws. Dr. Jas. J. Ramsom resides in this city, but is retired and has not beeen a member of the Society for about twenty years. Dr. J. V. Bean moved to Fairfield about twenty-five years ago and is still practicing.

Previous to the organization of the Des Moines County Medical Society Burlington had her "Medical Club" and a nameless organization or non-organization met spasmodically for many years antedating the formation of the Club. So that there was much pioneer work done in Burlington—enough to create sufficient interest in and about this city and county in medical subjects to form the nucleus for a State Society.

Sixty-one years ago, June 19, 1850, the Iowa State Medical Society was formed at Burlington with Dr. E. Lowe of Burlington as its president, Dr. H. M. Mathews of Burlington recording secretary, Dr. J. F. Sanford of Keokuk, corresponding secretary, and Dr. G. R. Henry of Burlington, treasurer.

May 1, 1849, Dr. John F. Sanford, then of Davenport, attended the meeting of the American Medical Association in Boston and returned to Iowa enthused for the formation of State and County Medical Societies. A few months later he moved to Keokuk and by correspondence and arduous travel by stage and horseback, succeeded in securing an attendance of twenty-five physicians and surgeons at Burlington for organization. Dr. John F. Dillon, now Judge Dillon of New York, is the only living charter member of the Iowa State Medical Society.

For a few years during the Civil War the annual meetings did not materialize, but in 1864 a good representation assembled in Iowa City and in 1868 at the Des Moines meeting it was decided to incorporate.

The State Society had almost multiplied her membership by ten, while the entertaining city together with many others, has a membership greater than that shown by the state charter roll. It is not too much to expect not less than one-fourth of the state membership to be in attendance on the 1912 meeting and that a very great many will be accompanied by the ladies of their families.

The members of the local society are enthusiastic; first in the confident hope that the meeting will be memorable for the real work accomplished and secondly, they are determined that a general good time, felicity and fellowship will be intermingled throughout.

Dr. C. H. Magee, the president, has a watchful eye over the general situation, and has called to his aid the following committee on arrangements, viz: Chas. P. Frantz, A. J. Thornber, and J. N. Patterson. A. W. Sherman, vice president and Bertha M. McDavitt, secretary, have the interest of the meeting at heart and are ever ready to assist. Burlington sends her advance greeting and felicitation to the profession of the state and bids every member a genuine and royal welcome.

---

### LIFE—THEN AND NOW.

It costs a lot to live these days,
More than it did in yore,
But when you stop to think of it,
It's worth a whole lot more.

—*Judge*

---

"In your sermon this morning you spoke of a baby as a 'new wave on the ocean of life.'"

"Quite so; a poetical figure."

"Don't you think 'a fresh squall" would have hit the mark better."
—*Boston Transcript.*

## IOWA STATE MEDICAL SOCIETY—HEADQUARTERS HOTEL BURLINGTON.

WEDNESDAY, MORNING AND AFTERNOON.

Scientific Program at Congregational Church.

3:00 P. M. Reception to wives visiting Physicians.
7:30 P. M. President's Address at Church.
9:00 P. M. Organization of House of Delegates at Church.
9:00 P. M. Theatre Party for visiting Physicians. Entertainment consisting of exhibition of scientific films, etc.

THURSDAY MORNING AND AFTERNOON.

Scientific Program at Church.

3:00 P. M. Reception or Theatre Party for wives of visiting Physicians.
7:00 P. M. River Excursion; Reception, Concert and Refreshments on board.

FRIDAY, MORNING AND AFTERNOON.

Scientific Program.

All meetings of House of Delegates after Wednesday P. M., will be held at the Commercial Exchange Rooms.

Thursday A. M. and P. M.—Eye, Ear, Nose and Throat Section at Commercial Exchange Rooms.

## SCIENTIFIC PROGRAM.

**Combination Medical and Surgical Section.**

Section on Medicine—Chairman, F. A. Ely, Des Moines.
Section on Surgery—Chairman, H. B. Jennings, Council Bluffs.

9:30 WEDNESDAY, MAY THE 8TH.

1. The Molding of Public Opinion Regarding the Care of Epileptics.....Wm. Pfannebecker, Sigourney
2. Early Diagnosis in Mental Diseases.....Lena Beach, Cherokee
3. Congenital Syphilis—How it May be Recognized and Best Treated.....G. S. Browning, Sioux City
4. The Diagnostic Value of Tuberculin with Respect to its Various Modes of Application.....E. H. Dwelle, Northwood
5. Major Surgery Outside of a Hospital.....J. L. Augustine, Ladora
6. The General Practitioner and Surgery.....Edw. Hornibrook, Cherokee

WEDNESDAY, 2 P. M. TO 5:30 P. M.

7. The Peritoneum.....Chas. B. Taylor, What Cheer
8. Right Rectus Incision for Appendicitis in Females.....J. R. Guthrie, Dubuque
9. Address on Medicine.....Geo. Dock, St. Louis, Missouri
10. Clinical Importance of the Sequelae of the Infectious Diseases of Childhood.....M. J. Moes, Dubuque

11. The Differential Diagnosis and Treatment of the Hemorrhagic Diseases of the New Born.....L. E. Kelley, Des Moines
12. Etiology and Pathology of the Chronic Arthritides.....Wm. Rendleman, Davenport
13. Prophylaxis and Non-Surgical Treatment of the Chronic Arthritis.....C. F. Starr, Mason City
14. Arthritis Complicating Scarlet Fever, With Report of a Case.....E. T. Edgerly, Ottumwa

7:30 P. M.—President's Address.

Thursday, May 9—9:00 A. M. to 12:30 P. M.

15. Post Operative Dilitation of the Stomach.....C. E. Ruth, Des Moines
16. Diagnosis of Diseases of the Upper Abdomen.....D. C. Brockman, Ottumwa
17. Chronic Pancreatitis and Its Management.....Wm. Jepson, Sioux City
18. Oration on Medicine.....J. F. H. Sugg, Clinton
19. Etiology and Pathology of Arterio-Sclerosis.....B. L. Eiker, Leon
20. Clinical Manifestations of Arterio-Sclerosis, Other than Cerebral, With Suggestions as to Prevention and Treatment.....J. Fred Clark, Fairfield
21. The Use of the X-ray in the Diagnosis of Heart Disease.....W. L. Bierring, Thos. A. Burcham, Des Moines

Thursday, 2:00 P. M. to 5:30 P. M.

22. Caesarean Section for Placenta Previa.....Donald Macrae, Council Bluffs
23. Carcinoma of the Caecum; Its Diagnosis.....Oliver J. Fay, Des Moines
24. Varicose Veins and Varicose Ulcers.....H. C. Eschbach, Albia
.....H. C. Eschbach, Albia
25. Undecended Testicle.....A. L. Wright, Carroll
26. Address on Surgery.....S. C. Plummer, Chicago, Illinois
27. Cerebral Contusion.....Prince E. Sawyer, Sioux City
28. Physiology and Pathology of the Hypophysis Cerebri.....John T. McClintock, Iowa City
29. Bismuth Paste.....J. C. Powers, Hampton

7:30 P. M.— Thursday.

30. Oration on Surgery.....A. M. Pond, Dubuque

Friday, May 10—9:30 A. M. to 12:30 P. M.

31. Autogenous Vaccines in the Treatment of Infectious Diseases.....H. M. Decker, Davenport
32. The Prophylactic and Therapeutic Value of Typhoid Vaccine, and the Methods of Their Administration.....L. Reppert, Muscatine

33. Typhoid Complications and Their Management.....N. C. Schiltz, Des Moines
34. Increased Diet in Typhoid—Arguments For and Against.....M. J. Kenefick, Algona
35. The Surgical Complications of Typhoid Fever.....J. C. Rockafellow, Des Moines
36. Perforative Intestinal Lesions, the Problems of Their Early Diagnosis and Treatment.....A. J. Burge, Iowa City
37. Pseudo-Leukemia.....N. Schilliong, New Hampton
38. Title Unannounced.....Allen Staples, Dubuque
39. Title Unannounced.....R. Evans, Ft. Dodge

House of Delegates.

## SECTION ON RHINOLOGY, OPHTHALMOLOGY AND OTO-LARYNGOLOGY.

**Commercial Exchange Rooms.**

MAY 8—1:30 P. M.

Address of Chairman, G. F. Harkness, M. D., Davenport, Iowa.

1. Traumatic Injuries of the Cornea.....T. U. McManus, Waterloo

Special attention being given by the author to the use of the cautery.

2. Contusions of the Eyeball.....Lee Weber, M. D., Davenport

Causes, direct and indirect violence. Injuries to the cornea and sclera, iris and ciliary body, choroid, retina and optic nerve. Dislocations of lens Intracoular hemorrhage. Complications. After effects. Prognosis treatment.

3. Accessory Sinus Diseases.....W. W. Pearson, M. D., Des Moines

Connecting cavities of upper respiratory tract; history of same and time of development. Frontal, ethmoidal, antrum, posterior ethmoidal, sphenoidal, and middle ear with special sense organ. Lack of uniformity in cavities and orfices. Lining membrane. General conditions leading to local disease. Remote complications. Infrequency of chronic involvement. Malignant conditions. Associated optic nerve affections. Different types of bacteria, etc., present. Some of the operations and cases.

4. Catarrhal Otitis Media.....F. G. Murphy, M. D., Mason City
5. The Pharyngeal Tonsil.....B. D. LaForce, M. D., Ottumwa

Pocket producing folds of lymph tissue in post nasal space. Acute inflammation of pharyngeal tonsil frequent but often overlooked. Cause of acute otitis media frequently. Mouth-breathing children have no conception of normal way to breathe. In ear disturbances adenoids of more importance than faucial tonsils. Advisability of not doing adenoid operations during acute inflammations of ears and respiratory tract. Hemorrhage in adenoid operations, dan-

gers and methods of control. Anaesthetic required. Adenotome and curettes.

6. Pathoganicity of Waldeyer's Ring in Relation to Aural Disease.....P. R. Wood, M. D., Marshalltown

Ninety per cent of middle ear diseases originate in the pharyngeal vault. Ten per cent of adenoid children fail to display definite adenoid symptoms. The small adenoid more generally jeopardizes hearing function. Majority of adenoids imperfectly operated upon. Vicious circle between adenoids and faucial tonsils and turbinates. Necessity of curetting Rosenmuller's fossa to relieve middle ear deafness. Author's curettes.

MAY 9—9:00 A. M.

7. Eye Strain in Children—Special Reference to Chorea.....F. W. Bailey, M. D., Cedar Rapids

The relation of the visual apparatus with the nervous system. Chorea and eye strain. Percentage of choreic patients exhibiting refractive errors. Effect of correcting the refracting error upon the symptoms of chorea. Report of five cases of chorea cured and two partially cured by properly adjusted glasses.

8. Embalances of the Coular Muscles.....F. E. V. Shore, M. D., Des Moines

9. Submucous Resection of the Nasal Septum.....F. Roost, M. D., Sioux City

Development of the operation and since simplified, more frequently performed. Button hole operation versus open dissection and lifting mucous membrane with sharp instruments. Resection without preliminary lifting of mucous membrane. Adaptability of this method to certain cases. Facility of performance and lessening of danger of tearing adherent membrane.

10. The Use and Comparison of Nasal Dressings.....W. S. Windle, M. D., Oskaloosa

Composition and merits of various nasal dressings offered in the market. Authors use of ointments in nasal diseases. Recommendation of author in the use of Bismuth subnitrate in several combinations with other drugs to meet therapeutic indications in some nasal disorders, including atrophic rhinitis and allied conditions and acutely inflamed and swollen sensitive mucous membranes.

11. Practical Conclusions from Labyrinthine Studies.....E. R. Lewis, M. D., Dubuque

Review of main facts elicited by normal labyrinthine and allied reactions. Deductions. Co-relation of vestibular, cerebellar and ocular functions. Cases illustrating de-

parture from normal. Circumscribed and diffuse labyrinthine and retro-labyrinthine disease; disease of right frontal lobe; disease in distribution of cerebello-spinal tract.

MAY 9—2:00 P. M.

12. Gastro-Intestinal Auto-Intoxication and its Relation to Diseases of the Eye.....H. B. Gratiot, M. D., Dubuque

Limitations of Auto-intoxication. Distinguished from auto-infection. Probable cause of various diseases of the Eye. Difficulty of recognition. Influence on Eyelids, Conjunctiva, Cornea, Uveal Tract, Optic Nerve and Retina; on errors of refraction; on surgical cases. Treatment by catharties; intestinal antiseptics and diet not always satisfactory in ambulatory patients. Necessity of hospital treatment, colonic flushings, etc.

INVITATION ADDRESS.

13. The Widening Boundary of Medicine in its Relation to Otology, Rhinology and Laryngology.....Dr. S. J. Kopetzky, New York, N. Y.

14. Treatment of Tubercular Laryngitis.....L. W. Dean, M. D., Iowa City

Its history, the use of the actual cautery, of tuberculin, silence, sanitorium treatment and local treatment. Other measures necessary to assist with the use of the cautery in order to secure a good result. Conditions aiding in the prognosis.

15. Some observations on Mastoiditis.....F. E. Franchere, M. D., Sioux City

Consideration of pathological findings in cases that have been operated upon and their relation to the symptomatology of the cases. Points in diagnosis, prognosis, technic and after treatment.

16. Spontaneous Rupture of the Internal Carotid Artery Complicating Mastoiditis with Case Report.....L. L. Henninger, M. D., Council Bluffs

Of rare occurrence. One other case found in author's search of literature. Nothing distinctive about case in beginning. Necrosis and breaking down process necessarily precedes. Thinning of arterial walls. Symptoms of pain, hemorrhage and possibly facial paralysis. Clot and holding back by surrounding tissues may avoid sudden fatal termination. Treatment: tying of carotid artery.

STATE MEDICAL WOMEN.

TUESDAY, MAY 7.

Morning Program—Hotel.

Luncheon.

Afternoon Program—Hotel.

4:30. Auto trip with refreshments at Country Club.

7:30. Banquet, Hotel Burlington.

TUESDAY, MAY 7—8:00 P. M.

Meeting of Council and County Secretaries, at Commercial Exchange Rooms.

## COMMUNICATION.

### Fee Splitting.

EDITOR JOURNAL:

The article in March Journal by Dr. Kime is to the point. The subject has been pretty thoroughly discussed of late, so I shall not attempt to enlarge, but suffice it to say, the profession in some places is becoming debauched from the practice. Without mentioning names, I will state that the cities of Cedar Rapids and Clinton each have a specialist in such work—and they have their system arranged to perfection. They know all the correspondents of the daily papers and many of the telephone operators, and their name appears daily somewhere, as a sort of advertisement—yet they try to appear ethical before the profession. They correspond with physicians far and near, and make personal calls to arrange their nefarious work. I am speaking from experience, remember, and not from hearsay. Scores of physicians know of the exact condition of affairs and patronize them, but as money is their God, they are silent. How long is this going to continue and is the profession as a whole going to put an end to it? I for one, am disgusted with such work, and unless something is done I mean to make a public statement in the secular press over my signature, telling the true state of affairs, and names will be mentioned, and it will be strong enough to cause quite a stir. Publicity is probably the only remedy, and it is high time our profession as an ethical society, was getting rid of these vampires. In many places the laity fully understands these practices—and it is a terrible drawback to the profession. I could go into detail, citing scores of cases, the particulars of which are *rotten*, and if some of these fellows don't sit up and take notice and govern themselves accordingly, I will get after their scalps, so I will put them on probation a reasonable time. They "can fool some of the people all of the time, and all of the people some of the time, but they can't fool all of the people all of the time."

"GENERAL PRACTITIONER."

---

C. A. HENRY, M. D., FARSON, IOWA.

Doctor Kime's able defense of the profession's honor and integrity is surely due a vote of thanks. But for the fearless and righteous protestations of a few *real* men, every precious noodle would bear the brand of infamy!

And why not?

The public generally is taught to believe that the medical college is the genuine School for Scandal, that the family physician barters in human lives, and that the average surgeon is a butcher who steals from the sick man's purse!

What's back of all this twaddle?

MONEY!

And what about the money?

EVERYBODY WANTS IT!

But there are a few men who would, as if by divine right, appropriate every glittering simoleon unto themselves. So they raise a hue and cry, and shout, "Help! Help! The wolf! The wolf!"

Aye, the wolf, sure enough!

Did you ever know a great surgeon to do, say, a prostatectomy for the fellow who wasn't able to pay, then permit himself to be dangled before the public as a humanitarian, a philanthropist, a model Christian gentleman, "who, picking up a certain amount of pecuniary emolument here below, expects to realize a very large amount of his reward in the Hereafter," and later do the same operation, or one similar, for the poor man's rich neighbor, collecting therefor about $1,000, when, under any circumstances, $300 would have been a princely fee?

If perchance you have, do you think that great man's heart was bursting with honest love and compassion for the poor fellow sufferer, or would you dare to think that maybe he had been casting for big fish under the mask of charity?

At any rate, why should an honest man, under any circumstances, allow his manly pockets to be stuffed with unearned money, whilst his tearful voice attunes itself to heaven's ears, pleading that the poor sufferer be not sold, bartered, robbed or cheated by some unscrupulous competitor, who, perhaps, never collected a hundred dollar fee in all his life?

Family physicians never divide fees amongst themselves. They never get fees greater than are due them. There can be no doubt, however, but that physicians and surgeons sometimes split a fee. But they are not the original fee splitting combination.

Before the halcyon days of the opulent surgeon, physicians dreamed dreams, and made prescriptions. In one respect their dreams and their prescriptions were very much alike. Across the tail of each there was a bold stroke—always a bold stroke. "Some day," the Dream said, "you will be *the old family doctor!*"

It was a pleasant dream, as good to think about as bile, and, sometimes, its tail was stroked even bolder than the preseription's!

But the Dream was illusive. All the doctors dreamed that Dream. And, gallant cavaliers they were, ALL paid high court to the fickle patient.

Now, when the truth is out, money counted in those grand old days, just as it counts now, for almost everything. The patient liked money. No difference what his vocation (you may ask your grandfather about this) he was a business man. He, too, dreamed his dreams. And he was a hard, cold calculator.

So he called a physician. If his sickness lingered, he consulted another; perhaps a third. Then, when he was quite recovered, he went to settle his accounts. And he who, other things considered being equal, *split fees with him*, secretly of course, had reached his fane of

fame—his Dream was materialized—he was indeed that family's old family doctor!

Known in the old days as a way of competing for business it was really a system of fee splitting, and it was in vogue long before the dawn of modern surgery.

When that day arrived, however, the bloody spectacle appalled the public eye. Also, it appealed to it, things spectacular always do. Physicians and surgeons (who are really not half so stupid as some folks would have it), looked on, took notes, and then consulted. And it was the first honest consultation, between themselves, held in many years.

"I am sorry, my dear Gaston," cried the physician.

"Nay, my dear Alphonse, it is I who repent—" interrupted the surgeon. And to square accounts with the past, they did a hundred dollar job together, labeled it surgical (at the shrewd's surgeon's suggestion), cashed the account in a few days, and, of course, divided the money.

But what has proved to be the joke of that transaction was the kind of fee. *It was a surgeon's fee,* a great big fee, bigger than the patient had ever heard of, but he paid it without a murmur, for the physician explained the new brand of goods, and the surgeon (wise old owl that he was) looked quietly on, and let him!

The law should fix a fee schedule to apply to every class of practice whether medical or surgical.

The people should study this fee schedule. And if they found any $1,000 fees in the list, they should be taken into the confidence of some one versed in such matters, and the thing explained.

No, the public will not object to paying a reasonable fee once, whether it goes to one or a dozen doctors in the case. But if every physician and surgeon sitting in the game hold a full house against him (if you know what that means) it would certainly be a very foolish fellow who wouldn't protest.

Let's be reasonable—all of us!

---

## ANOTHER COMING.

An Irishman was standing near the railroad when a freight train passed. There was a green flag on the rear of the caboose. The Irishman asked the man standing nearest him what that green flag meant. The man said, "It means another coming." A few days later, one Sunday afternoon, the man met the Irishman with his wife, and they were wheeling a baby in the little carriage. The carriage had a green flag on it.—*Benj. F. Beardsley, M. D.*

---

The pessimist stands beneath the tree of prosperity and growls when the fruit falls on his head.

# IOWA MEDICAL JOURNAL

A Monthly Journal
Devoted to the Interests of the Iowa Profession

E. E. DORR, M. D. Editor and Proprietor.

Subscription $2.00 per year, in advance.

"For Sale" and "Want" Ads, $2.00 each insertion. Write for
Physician's Cards, $5.00 per year. Advertising Rates.

We request short papers and reports of cases from Iowa Doctors. All papers should be typewritten. Reprints furnished at cost and should be ordered when paper is sent us, as it saves expense.

We want papers from county societies.

**OUR PLATFORM.**

**The Improvement of the Health of Iowa People.**
**The Improvement in Hygienic Conditions in all Iowa Cities.**
**The Improvement of the Profession, Individually and Collectively, in the Art and Science of Medicine.**
**The Improvement in Legislation so as to require High Attainments of every Practician, regardless of his School or Pathy.**
**The Improvement in Organization, making every legally Registered Physician of Good Standing in his Community a Member of his County and State Society.**

Vol. XVIII Des Moines, April 15, 1912 No. 10

### A Statement.

Last year the complaint was made against the Journal that it relied too much on the State Society papers for its contents. We were not given an opportunity to refute the charge.

Our Journal, under contract with the State Society, last year published 309 pages of papers and proceedings of the State Society, which were contributed by 42 members. We also published, during the same time, 200 pages of original articles contributed by 47 men. In addition to which, there was an average per issue, of 3 pages of news notes, 1½ pages of County Society reports, and 4 pages of editorials, with numerous cuts and charts. The cost to the State Society was $2,438.98, or $1.25 per member. The House of Delegates will be interested in comparing the cost in previous years with that under the new plan.

### The State Meeting.

The Sixty-first Annual Meeting of our Society will be held in Burlington May 8 to 11, 1912. It will be of interest to our members to know that the organization was effected in Burlington.

Many will be interested in the letter of Dr. Chas. P. Frantz, regarding the meeting and what the Burlington profession are preparing to do to us. The chairmen of the sections have done splendid work and offer one of the best programs ever arranged for a meeting of the Society.

This year there are but three sections. Dr. Harkness of Davenport, has secured an unusually attractive program in the Eye and Ear Section, and those interested will be well repaid by attending the sessions. Heretofore but one day has been devoted to this section, but this year there will be three sessions, one on the afternoon of the 8th and two on the 9th, Dr. S. J. Kopetzky of New York, will be present and give a paper.

The Medical and Surgical Sections have arranged for one program under general sessions that will continue from 9 a. m., May 8, to 5 p. m. on the 11th. This plan is an innovation for Iowa, but has been followed by the Illinois Society and others. The invited speakers for this session are Dr. S. C. Plummer of Chicago, and Dr. George Dock of St. Louis.

The program is published in full in this issue of the Journal, and every one should look it over carefully, and arrange to be present and hear some portions of it.

The auto rides and parties for the ladies will be numerous, and one grand boat-ride is planned for every one on the evening of the 10th.

You owe it to your patients to attend the meeting and you owe yourself the vacation it will be in getting away from work and meeting old friends.

---

### Health Laws for Marriage Certificates.

About a month ago a noted divine in Chicago announced that after a certain date applicants for his services at marriage services should present a certificate of health from a reputable physician.

The ministers throughout the country are fully cognizant of the necessity of such a demand, but there are a few charlatans who wear the robes "to serve the devil in" and these are "ferninst" anything that may interfere with the small remuneration, marriages may bring them.

To relieve the timid minds of the priestly, it is proposed that a general law should be made requiring certificates of health to be filed upon making application for marriage certificate. More than twenty years ago, such a law was proposed in Iowa, and the Hon. Wesley Redhead introduced a bill in the legislature, but it received no support from those who fully appreciated its value—for fear of critcism. The public mind is now receptive for such a law, and doubtless an effort will be

made at the next general assembly, to pass a bill that will limit disease, to prevent idiocy and add much to the future physical welfare of the commonwealth.

We take the liberty of quoting from an editorial of the A. M. A. Journal, April 6.

One preacher in particular is quoted as waxing eloquent in the denunciation of what he was pleased to call "health certificate marriage." Said he: "If you would rob the holy marriage rite of its sanctity, if you would divest a sacred custom of its beauty and holiness, if you would make the union of two souls a commercial transaction, then establish a custom which will permit the physician and his science to stand between two hearts that are drawn to each other." At the risk of spoiling this perfervid utterance, we fain would take the liberty of paraphrasing it, thus: If you would rob the holy marriage rite of its present capacity of permitting the infection of your sisters and your daughters with loathsome diseases, if you would divest a sacred custom of its potentiality for perpetuating epilepsy and idiocy, if you would make the union of two souls synonymous with the union of two clean bodies, then establish a custom which will permit science to stand as a faithful guardian of health and happiness over the two hearts that are drawn to each other!"

---

### School Inspection.

As early as 1832, the physician was called into council by the school boards of Germany and Sweden. In the latter country the report of the medical men lead to several reforms—that of better light and comfort in the schoolroom, and shorter hours for the children. In Germany, medical services were requested to control epidemics, which were not uncommon. From then until now, school boards have paid increasing attention to sanitary and health matters.

From the appointment of inspectors to investigate and control infectious diseases in the schools, to the general examination of the children for defects and minor ailments, and the introduction of nurses to care for the sick and see that regulations were carried out, is the progress along this line in the United States.

Now, in all the large cities, nurses are doing most of the work, and the physician is called only to confirm diagnosis and control quarantine of contagious diseases, under direction of the proper health authorities. The nurse examines all the children, sending home those who are sick or in need of medical treatment. She follows them to the home and importunes the parents to secure the medical aid necessary, or in a few instances, furnishes that aid herself. She accompanies them to the dispensary and returns them to the schoolroom.

Eye defects, among the children of the public schools, are unnec-

essarily high—averaging about 40 per cent, and several cities are now furnishing glasses to those who cannot buy them.

Physical and mental defects are now recognized as the cause of truancy.

---

Dr. J. W. Cokenower of Des Moines, is again making arrangements for a special car to go with the official train, which leaves Chicago at 3 p. m., June 2, fo rthe meeting of the A. M. A., at Atlantic City, June 4.

The A. M. A. Special will run over the Pennsylvania Lines, and as the majority of doctors from the central west will go by this train, it was thought that it would be a good plan to have a special car in this train for the Iowa doctors.

The Pennsylvania Lines have usually been able to secure the Journal train, and it is much pleasanter for the Iowa doctors to be with the majority of those who attend. Dr. Cokenower is ready to answer any questions regarding the special to Atlantic City.

---

## SOCIETY REPORTS.

### POLK COUNTY

Medical society held its monthly meeting at Des Moines, March 26. Subjects directive to the betterment of the schools made up the program.

"The Need of Sanitary Inspection of Schools, and Medical Inspection of School Children," was the subject assigned to Dr. E. E. Dorr. He gave a review of the history of schools from the time the medical men entered as advisers, and told of the development of inspection and the introduction of nurses into the work; also reported on the examination of the Des Moines schools, and offered a report of the nurses for the last two years.

"Tonsillar and Adenoid Affections of School Children; Their Dangers and Proper Correction," was the subject of a paper by Dr. F. E. V. Shore. He cautioned against the prevailing tendency to indiscriminate surgery, and related several instances to prove his opinions.

"The Binet Test for Mental Deficiency, and the Need of Ungraded Classes for Our Public Schools," was handled by Dr. F. A. Ely in a very comprehensive manner. Dr. Ely spoke from notes and it is to be regretted that the subject as discussed by him could not have been reproduced.

### WATERLOO

Medical Society, on March 6, held its regular monthly meeting with the following program: "Etiology and Chronic Nephritis," Dr. J. E. Allen. "Treatment of Acute Nephritis," Dr. E. Brinkman. "Etiology and Chronic Nephritis," Dr. E. R. Shannon. "Treatment of Chronic Nephritis," Dr. W. H. Bickley.

Club rooms have been opened in the Y. M. C. A. building, where

the Society will maintain a medical library and reading room, in which the current medical journals can be found. This plan had been under consideration for some time and the physicians of Waterloo are to be congratulated upon at last accomplishing their desire.

CLINTON

County Medical Society held the regular monthly meeting on April 1, after a 6:30 dinner. Dr. M. S. Jordan read a paper on "Peptic Ulcer." Dr. J. F. H. Sugg discussed the subject from a surgical standpoint while Dr. J. C. Langan talked on the medical side.

MISSOURI VALLEY MEDICAL SOCIETY.

The event in medical society affairs in central Iowa was the meeting of the Missouri Valley Society at Colfax, on March 21, 22 and 23.

It was important enough to bring Dr. T. D. Crothers from Hartford Conn., and Drs. Bremmerman, Cobb and Pennington from Chicago. St. Joe, Kansas City and Omaha were well represented and the occasion will be long remembered by a hundred or more members who were present and took part in the program.

Many physicians of central Iowa took advantage of the long and strong program to be present and enjoy with the members, both the papers and discussions. It was a happy idea that brought the members together under one roof for a three days' enjoyable visit.

Saturday following the meeting, clinics in surgery and medicine were given in the Des Moines hospitals, and at noon a banquet was given the visiting members by the Des Moines doctors.

The annual meeting will be held in Omaha, in September. Dr. J. M. Bell is president and Dr. Chas. Wood Fassett, secretary, both of St. Joe, Missouri.

LINN

County Medical Society met in Cedar Rapids March 12, where the following program was carried out: Morning session—"Some Observations on Doudenal Ulcers," Dr. G. E. Crawford, Cedar Rapids. "Prostatectomy and Report of Cases," Dr. J. J. Murphy, Cedar Rapids. Election of Officers. Afternoon Session—"Some Recent Cases in Practice," Dr. W. Woodridge, Central City. "A Personal Experience with Blood Transfusion," Dr. B. L. Sheldon, Cedar Rapids. Lecture. "Chemistry of Oleomargarine," Chas. W. Oliver, Chicago.

This was the annual meeting, and officers were elected for the following year: President, B. L. Sheldon; secretary, H. W. Bender; delegate to State Society, Dr. W. Woodridge, Central City.

HENRY

County Medical Society held its annual meeting in Mt. Pleasant, February 29. Dr. F. R. Wilson of New London, was elected president. Dr. O. A. Geeseka of Mt. Pleasant, secretary and Dr. F. C. Mehler of New London, delegate to the State Society meeting.

## BOOK REVIEWS.

### TEXT-BOOK OF OPHTHALMOLOGY.

By DR. PAUL ROEMER, Professor of Ophthalmology at Greifswald. Translated by Dr. Matthias Lanckton Foster. Member of the American Opthalmology Society. With 186 illustrations and 13 colored plates, bound in cloth. Rebman Company, New York, publishers.

This book carries clinical instruction as given at the bedside and in the active teaching of the specialist. Each disease is taken up in minutest detail and symptoms elaborated for the disease under discussion. Methods of examination and diagnosis are elaborately dwelt upon, and the daily treatment in each case, outlined and discussed.

It seems to us that the student will find much to refresh and strengthen his memory of ophthalmology, and that the book will be a great help, especially to those giving clinical demonstrations.

### THE TREATMENT OF SHORTSIGHT.

By PPROFESSOR DR. J. HIRSCHBERG, Geh. Med. Rat in Berlin. Translated by G. Lindsay Johnson, M. D., F. R. C. S. With twelve illustrations, bound in cloth. Rebman Company, New York, publishers.

This is a reproduced lecture on Myopia, that has for its foundation the experience of thousands of cases, covering a period of many years in the specialty. The results of such vast clinical advantages are given to the public in this volume of 120 pages.

### INTERNATIONAL CLINICS.

By HENRY W. CATTELL, A. M., M. D., Philadelphia, with the collaboration of Wm. Osler, M. D., Oxford; John H. Musser, M. D., Philadelphia; A. McPhedron, M. D., Toronto; Frank Billings, M. D., Chicago; Chas. H. Mayo, M. D., Rochester; Thos. H. Rotch, M. D., Boston; John G. Clark, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh; John Harold, M. D., London; and Richard Kretz, M. D., Vienna. A quarterly of illustrated clinical lectures and especially prepared articles on Treatment, Medicine, Surgery, Neurology, Paediatrics, Obstetrics, Gynaecology, Orthopaedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, etc. Price, $2.00. J. B. Lippincott Company, Philadelphia, publishers.

The same amount of interesting material as usual appears in this volume. The interesting feature of these articles is the completeness with which they are gotten up regarding etiology, diagnosis, technique and treatment. Dr. Samuel J. Kopetzky, who is the invited guest of the Eye and Ear Section at the meeting in Burlington, is a contributor to this volume. The papers in this volume deserve careful consideration.

### SURGICAL OPERATIONS.

A handbook for students and practitioners by PROFESSOR FRIEDRICH PELSLEUSDEN, Chief Surgeon to the University Surgical Clinic, and Chief of the University Surgical Polyclinic in the Royal Charity Hospital of Berlin. Translated by Faxton E. Gardner, M. D., New York. With 668 illustrations, bound in cloth. Rebman Company, New York, publishers.

Much care and attention has been given by the author in compiling this work. His descriptions and technique are fine and his after treatment deserve special mention. He covers the subject very thoroughly and satisfactorily in this volume of 700 pages, taking up first the ligation of arteries, then operations on extremities and continues with abdominal work. There may be nothing particularly new but the review given is certainly accurate and instructive. Only those operations that have proved simplest, safest and surest in results are described, thereby eliminating a long list of operations devised by many different surgeons. It is comprehensive and quite satisfactory.

## MEDICAL NEWS NOTES.

Dr. W. A. Kauffman of Conrad, has a new Case "40" auto.

Dr. P. L. Parsons has resigned as city health physician of Traer.

Dr. C. B. Taylor, What Cheer, spent a week in Chicago, in March.

Dr. H. B. Wilkinson of Perry, has a new 1912 model Mitchell car.

Dr. Van B. Knott of Sioux City, was seriously ill the middle of March.

Dr. George Hearst of Cedar Falls, spent the latter part of March in Canada.

Dr. C. P. Frantz of Burlington, was on the sick list in March, but is better now.

Dr. J. G. Bickley of Waterloo, spent a few days of March in Winnipeg, Canada.

Dr. and Mrs. C. M. Walters of Bancroft are spending a few weeks in California.

Dr. Nellie Noble of Des Moines, addressed the ladies of Dallas Center, March 2.

The Medical officers of the Iowa National Guard will meet in Clinton in May.

Dr. G. F. Severs of Centerville, was in Texas for about three weeks in March.

Dr. H. M. Dean of Muscatine, is recovering from an attack of sciatic rheumatism.

Dr. Leora Johnson of Iowa City, has returned from a prolonged visit in California.

Dr. Chas. Burnside of Des Moines, has removed to California, for an extended stay.

Dr. E. S. Heilman of Ida Grove has completed his post-graduate course at Harvard.

Dr. H. J. Brackney of Sheldon, is the proud possessor of a new Knabe grand piano.

Dr. L. B. Hathaway of Reinbeck, is recovering from a very severe attack of erysipelas.

Dr. H. W. Sigworth of Anamosa, was reported, early in March, as having a broken rib.

Dr. and Mrs. F. H. Connor of Nevada, are spending a vacation in southern California.

Dr. Samuel Bailey of Mt. Ayr, has announced his candidacy for state representative.

Dr. and Mrs. H. L. Walker of Cedar Rapids, have returned from a trip through Texas.

Dr. and Mrs. Ristine of Cedar Rapids, have returned from their month's visit in Texas.

Dr. Cyril Cron and wife of Hanlontown, are enjoying a very extended visit in Mexico.

Dr. B. F. Kirkland has filed a physicians' certificate with the county recorder at Waterloo.

Dr. C. D. Fellows of Algona, is the possessor of a new four-passenger Buick touring car.

Dr. and Mrs. J. A. White of Olin, started March 20, on a pleasure trip to the west coast.

Dr. W. P. Sherlock of Keokuk, was confined to the hospital in March with blood poisoning.

Dr. G. C. Stockman of Mason City, spent about a week of March traveling through the south.

Dr. W. R. Bolbaugh of Osceola, left March 20, for a short trip through Kansas and Nebraska.

Dr. C. Nysewander of Des Moines, was called to Dayton, Ohio, by the serious illness of his mother.

Dr. T. F. H. Spring of Sioux City, was confined to his home with lumbago the fore part of March.

Dr. K. R. Huff of Lineville, recently underwent an operation at the Mercy hospital in Des Moines.

Dr. W. E. Carpenter of Tama, has been spending a couple of weeks on his ranch in Washington.

Drs. G. R. and G. C. Skinner of Cedar Rapids, returned early in March from a trip through Mexico.

Dr. F. A. Osincup of Waverly, was very ill with pneumonia in March, but is now recovering nicely.

Dr. Wm. Painter of East Peru, has given up his practice at that place and moved to Angleton, Texas.

Dr. U. G. Grigsby of Perry, has been appointed company surgeon for the Milwaukee railroad, at Perry.

Miss Luella Bristol of Des Moines, has been elected superintendent of the Eleanor Moore hospital at Boone.

Dr. Ralph Brown of Dixon, has returned from Vienna, where he has been taking a post-graduate course.

Dr. H. W. Hill of Mt. Vernon, returned home the latter part of March, from a prolonged visit in Texas.

Dr. and Mrs. E. C. Chapman of Ft. Madison, visited a few days in March, with friends in Topeka, Kansas.

Dr. C. B. Hibbs of Mitchellville, has recovered from his recent illness and is again able to be at the office.

Dr. Helen Flint of DeWitt, who has been in Louisiana for some time, intends to return to DeWitt in April.

A class of twenty-one nurses graduated from the training school of the Iowa Methodist Hospital, in March.

Dr. O. B. Hawley of Corning, has been taking post-graduate work in Chicago, for the last three or four weeks.

Dr. and Mrs. O. A. Pitcher of Mt. Pleasant, left March 4, for a trip through Alabama and other southern states.

Dr. Sadie Doran of Davenport, was called to Memphis, Mo., the graduate work and will be gone for two months.

Dr. R. H. Payne of Richland, was reported ill during March, but we hope that he has entirely recovered by this time.

Dr. H. G. Welpton of Des Moines, is in New York taking post-latter part of March by the serious illness of her brother.

Dr. C. Brewster of Britt, has recently installed complete equipment for the treatment of eye, ear, nose and throat diseases.

Dr. and Mrs. F. O. Kershner have returned to Clinton, from their delightful wedding trip through the southern states and Cuba.

Dr. and Mrs. A. H. Johnson of Cedar Rapids, have returned from California, where they have been spending the winter visiting.

Dr. John C. Wright of Clear Lake, is soon to return to the active practice of medicine. He has been on the road for some time.

The alumni of Drake University Medical School have planned a large re-union for April 17 and 18, at Savery hotel, Des Moines.

Dr. W. C. Johnson of Thurman, went to Omaha the fore part of March, where he had a delicate operation performed on his nose.

Dr. G. M. Jones of Wayland, has returned home after two weeks' treatment at Burlington hospital. We hope he is very much improved.

Dr. L. W. Harding of Solon, who has been traveling in Mexico for a number of months, is expected to return to his home town soon.

Dr. C. H. Mulroney of Ft. Dodge, attended the meeting of the Medical Council of the American Medical association, held in Chicago in March.

Dr. J. R. Scott of Waterloo, has arrived in Berlin, Germany, where he is now taking post-graduate work in the study of the eye, ear and throat.

Dr. V. B. Knott of Sioux City, read a paper on "The Nurse as the Surgical Assistant," at a meeting of the Registered Nurses Association, March 13.

Dr. D. F. Fitzpatrick of Iowa City, went to Chicago in March, where he was operated upon for gall stones. Our last report says that he is doing nicely.

Physicians of Iowa will be interested in knowing that Dr. Florence Sherbon of the Victoria Sanatorium, Colfax, has perfected plans for nurse training in her institution.

Dr. B. C. Stewart of Ute, is in Chicago taking treatment for blood poisoning. The doctor recently scratched his finger while performing an operation and it afterward became infected.

Dr. E. C. Kauffman of Union, has gone to Fort Dodge to undergo a minor operation. His brother, Dr. F. E. Kauffman of Lake City, is looking after his practice during his absence.

Dr. A. B. Bowen of Maquoketa, left early in March, for Italy, where he will meet his daughter, Frances. They will tuor Italy, Greece, Germany and England before returning home in June.

Miss Esther Pearson has resigned as superintendent of Iowa Methodist hospital, to take effect May 1. She will be succeeded by Dr. W. T. Graham of the Methodist hospital, Indianapolis, Ind.

Dr. David Rust of Whiting, was thrown from a street car while in Omaha recently, and his arm and shoulders were badly bruised. According to our latest report, he is still confined to his home.

Drs. H. Irl McPherrin, E. R. Earwood, E. B. Winnett, J. R. Winnett and R. E. Parry have beeen chosen from Drake University Medical School, to serve as internes in the Iowa Methodist hospital.

Dr. Martin, formerly of Colfax, was in his home town the latter part of February. He reports his health very much improved since going to Denver, and that he is again in active practice of medicine and surgery.